JVC

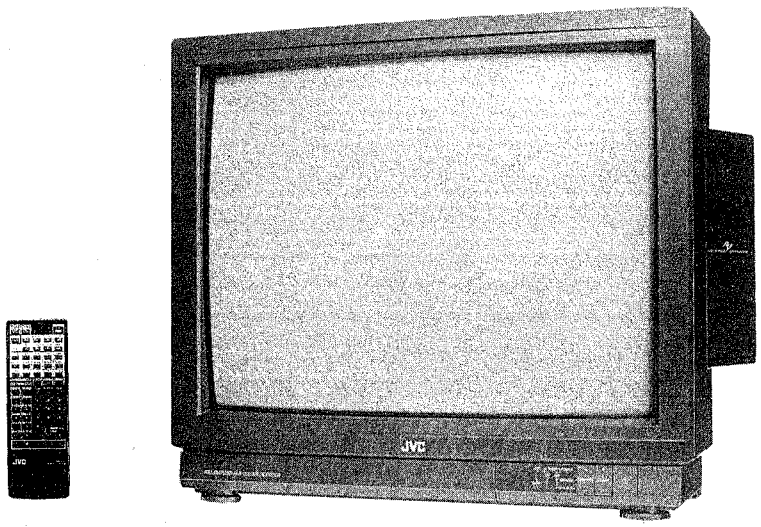
SERVICE MANUAL

25" COLOUR TV

MODEL AV-S250ENT

BASIC CHASSIS

BY-Ⅱ



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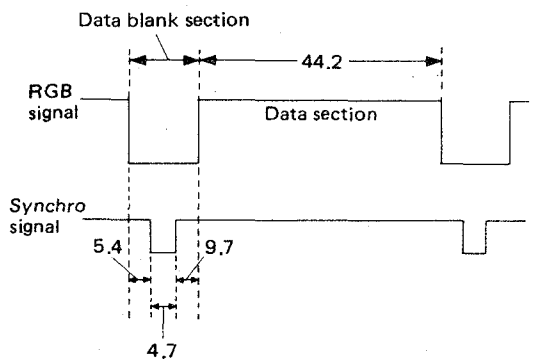
SPECIFICATIONS

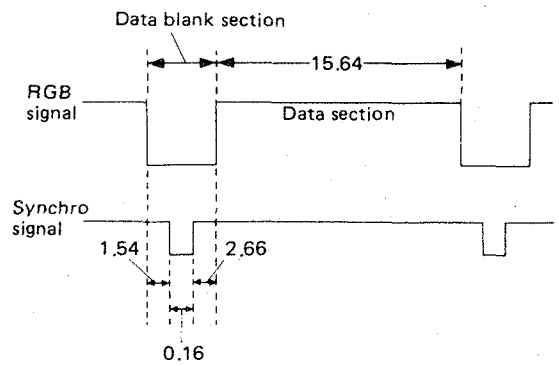
Dimension	65.8cm(W) x 44.8cm(D) x 51.2cm(H)
Weight	31.0kg
TV System & Colour System	
TV RF System	CCIR B/G
Colour System	PAL
Receiving Channel & Frequency	
VHF Ch. (V_L: $E_2 \sim E_4$, ITALY A ~ C)	47MHz ~ 68MHz
(V_H: $E_5 \sim E_{12}$, ITALY D ~ H)	174MHz ~ 230MHz
UHF Ch. (U: $E_{21} \sim E_{69}$)	470MHz ~ 862MHz
CATV Receiving Channel & Frequency	
MID Band (X CH. ~ Z CH)	68MHz ~ 89MHz
HYPER Band (S_1 CH. ~ S_{41} CH)	104MHz ~ 470MHz
Intermediate Frequency	
V. IF Carrier	38.9MHz
S. IF Carrier	33.4MHz (5.5MHz)
Colour Sub Carrier	PAL (4.43MHz)
ANT Input Impedance	75Ω Unbalanced
Power Input	220V AC, 50Hz
Power Consumption	150W (max.)/110W (avg.)
Picture Tube	63cm (25") In-Line Type Flat-Square Tube
Viewable Picture Size	36.2cm(H) x 47.6cm(W)
High Voltage	26.5kV ±1kV (at zero beam current)
Speaker	10cm Round Type, 8Ω x 2
	3cm Round Type, 440Ω x 2
Audio Power Output	10W + 10W
21 Pin PERI Socket (Euro Connector)	
Video Input	1 Vp-p, 75Ω
Audio Input	500 mVrms (Standard), High Impedance
Video Output	1 Vp-p, 75Ω
Audio Output	500 mVrms (Standard), Low Impedance
R/G/B Input	700 mVp-p, 75Ω
S-Video Input	Y: 1 Vp-p Positive, 75Ω (Negative Sync. Provided)
	C: 0.3 Vp-p (Burst Signal), 75Ω
Audio External Input (RCA Pin Jack)	500mVrms, High Impedance
TV Audio External Output (RCA Pin Jack)	920mVrms, Low Impedance
External Speaker Terminal	8Ω x 2
Tube	1
IC	53 (In TV), 1 (In Remocon.)
Transistor	172 (In TV), 2 (In Remocon.)

Recommend input signal (21 Pin PERI Socket)

H. SYNC period (μ sec.)



V. SYNC period (m sec.)



(Design and specifications subject to change without notice)

SAFETY PRECAUTION

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual many create shock, fire, or other hazards.
4. **Don't short between the LIVE side ground and NEUTRAL side grounding or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (⏚) side GND, the NEUTRAL (⏚) side GND and EARTH (⏚) side GND.
   Don't short between the LIVE side GND and NEUTRAL side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
5. If any repair has been made to the chassis, it is recommended that the B_1 setting should be checked or adjusted (See ADJUSTMENT OF B_1 POWER SUPPLY).
6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approvided by the manufacturer of the complete product.
7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3,000V AC (r.m.s.) for a period of one second.
. . . . . Withstand a voltage of 1,100V AC (r.m.s.) to an appliance rated up to 120V, and 3,000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

- **Alternate Check Method**
  Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.).
  Measure the AC voltage across the resistor with the AC voltmeter.
  Move the resistor connection to each exposed metal part particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.)

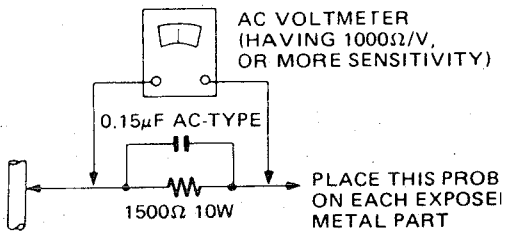


Fig. A

FEATURES

1. Adoption of PERI SOCKET with PERI Circuit.
2. Adoption of Module board with highly simplified circuit structure.
3. Newly incorporated is an OFF-TIMER with functions of max. 2-hour time setting in 30-min. units and of time balance indication.
4. An ON-TIMER also offers max. 24-hour time setting in 1-hour units plus time balance indicating function.
5. Multifunctional remote-controlling system enables controlling from alocation away from the device of ON-TIMER, OFF-TIMER, ON-SCREEN, POWER, PRESET, VTR and others.
6. With STEREO Multi-surround system.
7. V. HOLD and H. HOLD are deleted as a result of employment of IC (IC201) with built-in deflection circuit that adopts the countdown method for V./H. OSC.
8. A sound multiplex circuit is contained which enables reception of sound multiplex broadcasts (UK DIGITAL SOUND).
9. (Hyper) tuner compatible with CATV.
10. The PLL synthesizer formula is employed for the S. SELECT circuit of the tuner.
11. The TELETEXT function is built in.

OUTLINE

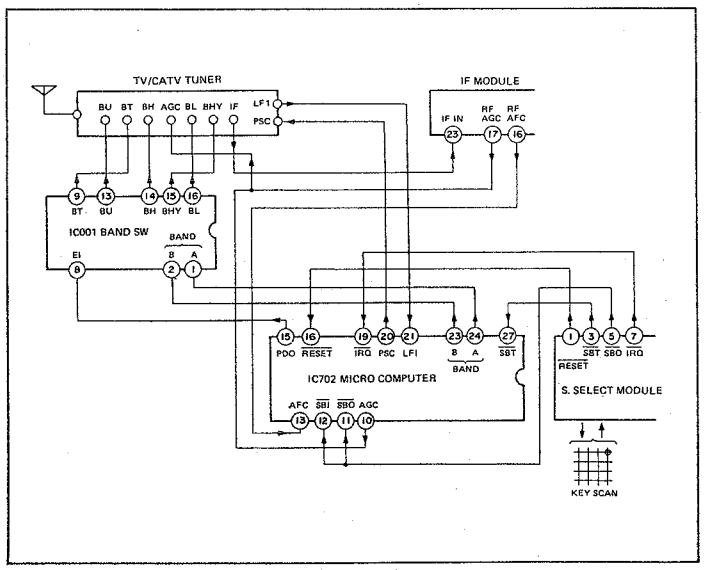
- THIS CHASSIS CONFIGURATION FOR THIS EQUIPMENT COMPRISES ABOUT 6 GENERAL BOARDS and 6 MOUDLE BOARDS. THEIR CONTENTS ARE AS FOLLOWS:

GENERAL BOARD	MODULE BOARD
1. SIGNAL PC BOARD ASS'Y	1. IF MODULE
2. DEF. & POWER PC BOARD ASS'Y	2. STATION SELECT MODULE
3. CRT SOCKET PC BOARD ASS'Y	3. PERI MODULE
4. A/V TERMINAL PC BOARD ASS'Y	4. TELETEXT MODULE
5. LINE FILTER PC BOARD ASS'Y	5. RGB SWITCH MODULE
6. DIGITAL SOUND PC BOARD ASS'Y	6. D.L. APACON MODULE

- OUTLINE OF S. SELECT CIRCUIT OF FREQUENCY SYNTHESIZER

1. 4 bit microcomputer for frequency synthesizer tuner
2. 4 bit A/D converter is built in
3. Adoption of the Pulse Swallow process (with PLL built in) allows the AFT (Auto Fine Tuning) function
4. Program memory (ROM) . . . . . 8 bit x 2,048 steps
5. Data memory (RAM) . . . . . 4 bit x 96 words

Block Diagram

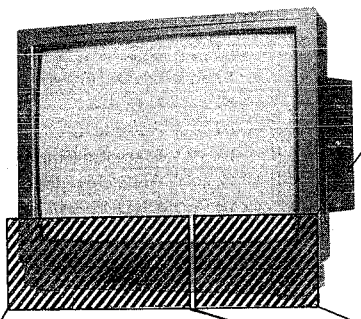


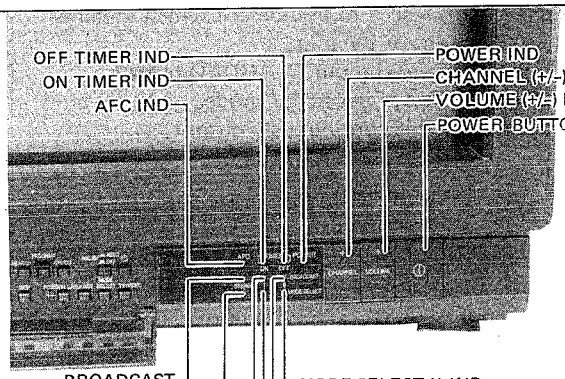
The PLL and state control of this equipment comprise the combination of the band switch-over/microcomputer/S. SELECT module circuits and control the S. SELECT circuit, ON SCREEN, volume control, etc.

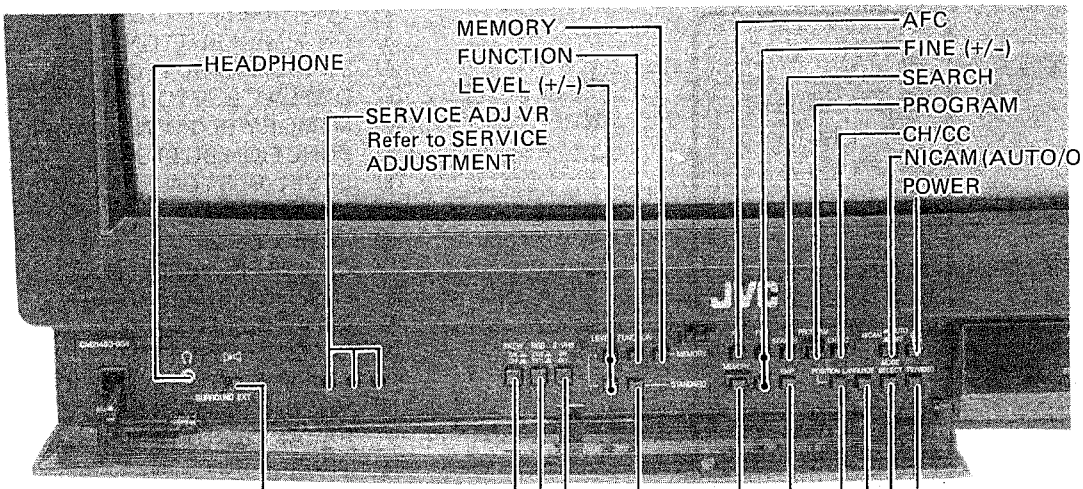
FUNCTIONS

* REGARDING THE OPERATING METHOD, REFER TO THE INST. BOOK

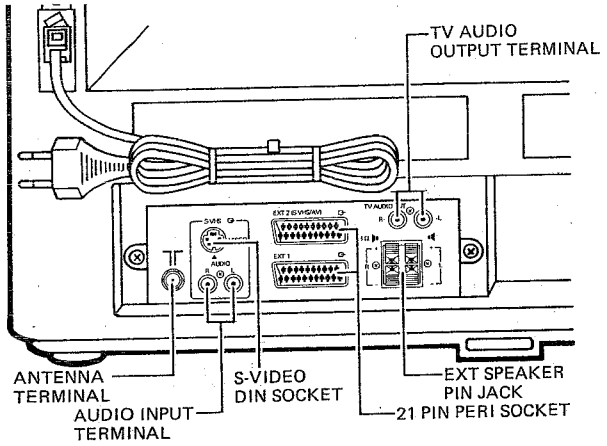
■ FRONT VIEW

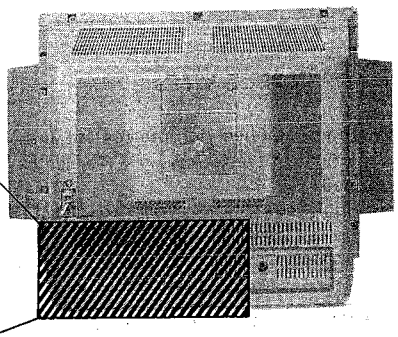






■ BACK VIEW

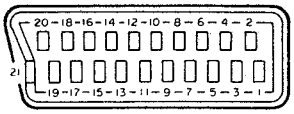




■ 21-PIN PERITELEVISION (SCART) SOCKET (EURO CONNECTOR)

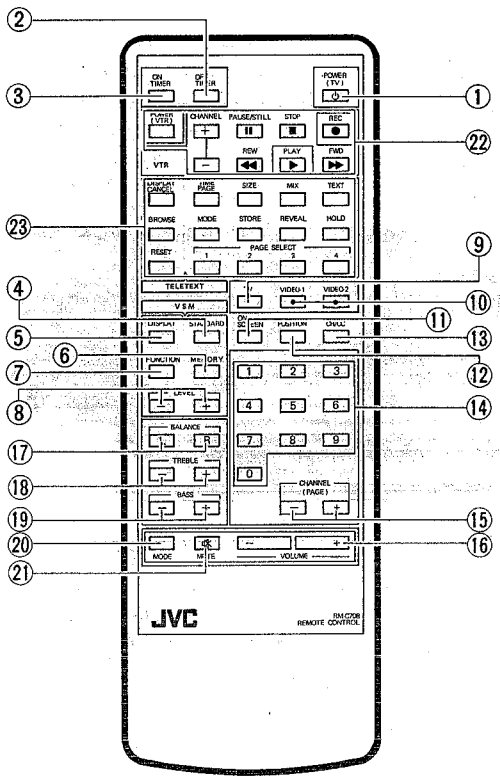
- This connector is used to input the RGB signals, to input and output the video/audio signals, and also to input the control signals. Connect it to equipment which matches the signal arrangement of the pins.
- Select the input signal using the TV/VIDEO button. When RGB signal is input, set to TV mode.
- A TV broadcast signal is continuously output.

• Pin assignment



Pin No.	Signal	Pin No.	Signal
1	Audio output	12	N.C.
2	Audio input	13	GND. for red
3	Audio output	14	N.C.
4	GND. for audio	15	Red input
5	GND. for blue	16	Blanking (Rapid SW)
6	Audio input	17	GND. for video
7	Blue input	18	GND. for blanking
8	Slow SW.	19	Video output
9	GND. for green	20	Video input
10	N.C.	21	GND.
11	Green input		

■ REMOTE CONTROL



① POWER BUTTON
② OFF TIMER BUTTON
③ ON TIMER BUTTON
④ STANDARD BUTTON
⑤ DISPLAY BUTTON
⑥ MEMORY BUTTON
⑦ FUNCTION BUTTON
⑧ LEVEL BUTTON
⑨ TV BUTTON
⑩ VIDEO 1 & 2
⑪ ON SCREEN BUTTON
⑫ POSITION BUTTON
⑬ CH/CC BUTTON
⑭ DIRECT CH BUTTON
⑮ CHANNEL (PAGE) BUTTON
⑯ VOLUME BUTTON
⑰ BALANCE BUTTON
⑱ TREBLE BUTTON
⑲ BASS BUTTON
⑳ MODE BUTTON
㉑ MUTE BUTTON
㉒ VTR CONTROL BUTTON
㉓ TELETEXT BUTTON

(TEXT, MIX, SIZE, TIME
PAGE, DISPLAY CANCEL,
HOLD, REVEAL, STORE,
MODE, BROWSE, RESET,
PAGE SELECT-1, 2, 3, 4)

• OPERABLE VTRs

With the supplied Remote control unit, some of the functions of the following VTRs can be remotely controlled.

Before start operation, be sure to turn the power of the VTR on.

For detailed operation, refer to the VTR instruction Book.

Note: Place the VTR so that it is within the operation range of the Remote Control unit.

OPERABLE VTRs (JVC)	
HR-D455[ ]	HR-D250[ ]
HR-D565[ ]	HR-D566[ ]
HR-D725[ ]	HR-D157MS
HR-D158MS	HR-D257MS
HR-D170[ ]	HR-D180[ ]
HR-D370[ ]	HR-D470[ ]
HR-D755[ ]	HR-S5000[ ]

HOW TO REMOVE FOR SERVICE

■ REMOVING THE REAR COVER

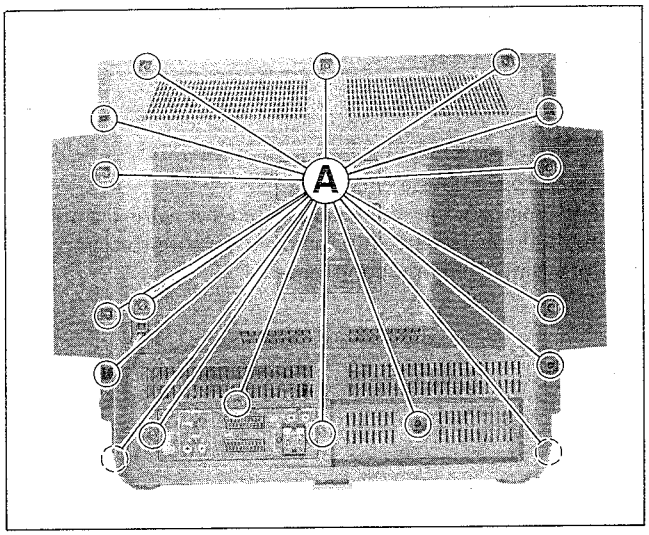


Fig. A

1. Unplug the power supply cord and remove the eighteen screws marked Ⓐ shown in Fig. A, then remove the rear cover.

■ REMOVING THE SIGNAL & DEF. POWER BOARD

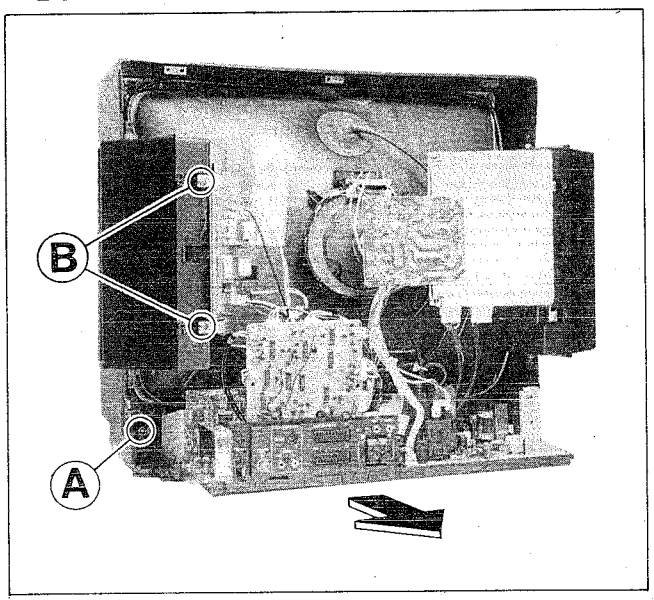


Fig. B

* After removing the rear cover.

1. Loosen the screw marked Ⓐ shown in Fig. B.
2. Then grip both sides of the chassis and draw it out to remove the rear cover. (Fig. B)

* When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT socket board.

■ REMOVING THE LINE FILTER BOARD

1. It can be removed with two screws Ⓑ shown in Fig. B.

■ REMOVING THE DIGITAL SOUND BOARD

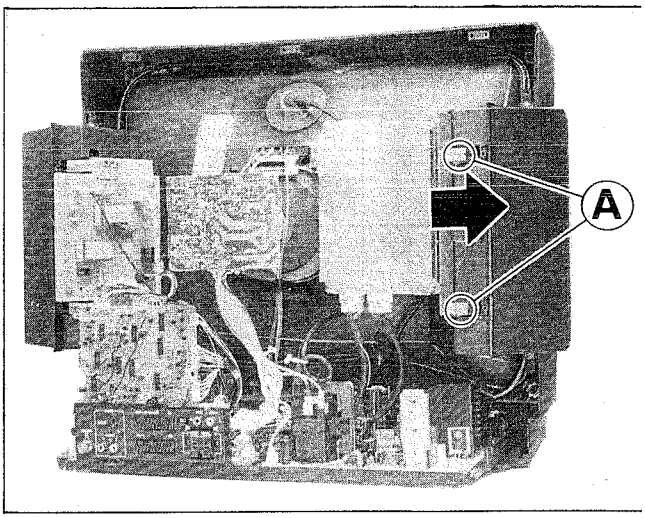


Fig. C

1. Remove the two screws Ⓐ shown in Fig. C.
2. Then shift the PC Board in the arrow direction to remove it.

■ REMOVING THE AV TERMINAL ASS'Y

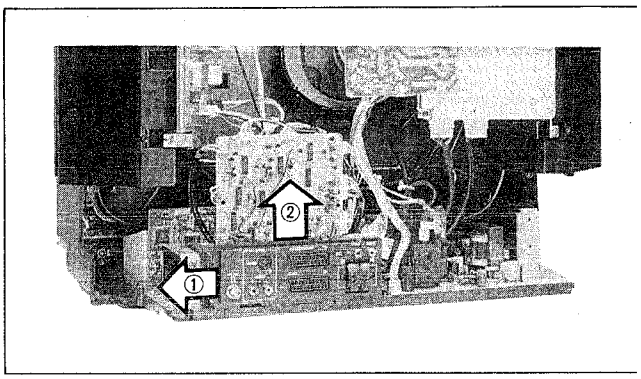


Fig. D

As shown in Fig. D , slide the AV TERMINAL ASS'Y in the allow direction (①) along the rail and stop it at the place where the rail widens out. Then the AV TERMINAL ASS'Y can be removed easily by pulling it up.
(in the allow direction (②)).

■ REMOVING THE SPEAKER BOX ASS'Y & COVER

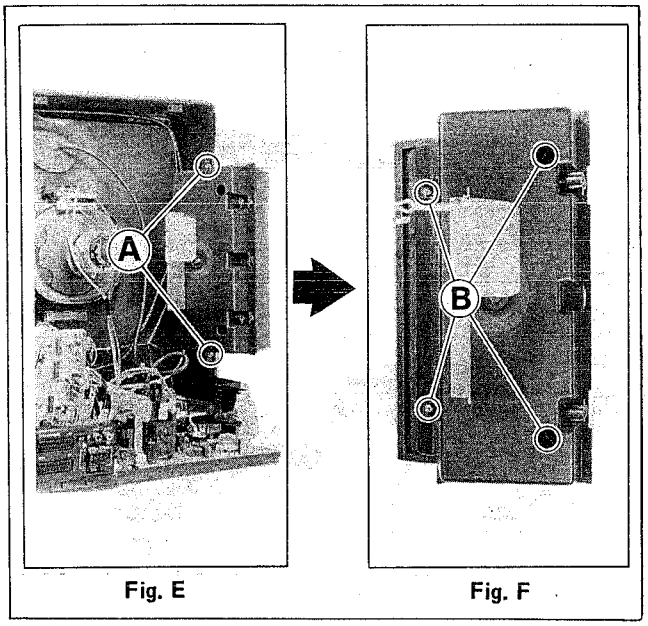


Fig. E Fig. F

1. Remove the two screws (A) shown in Fig. E.
2. Remove the four screws (B) shown in Fig. F to replace the speaker cover.
3. Remove the speaker cover on the opposite side through a similar procedure.

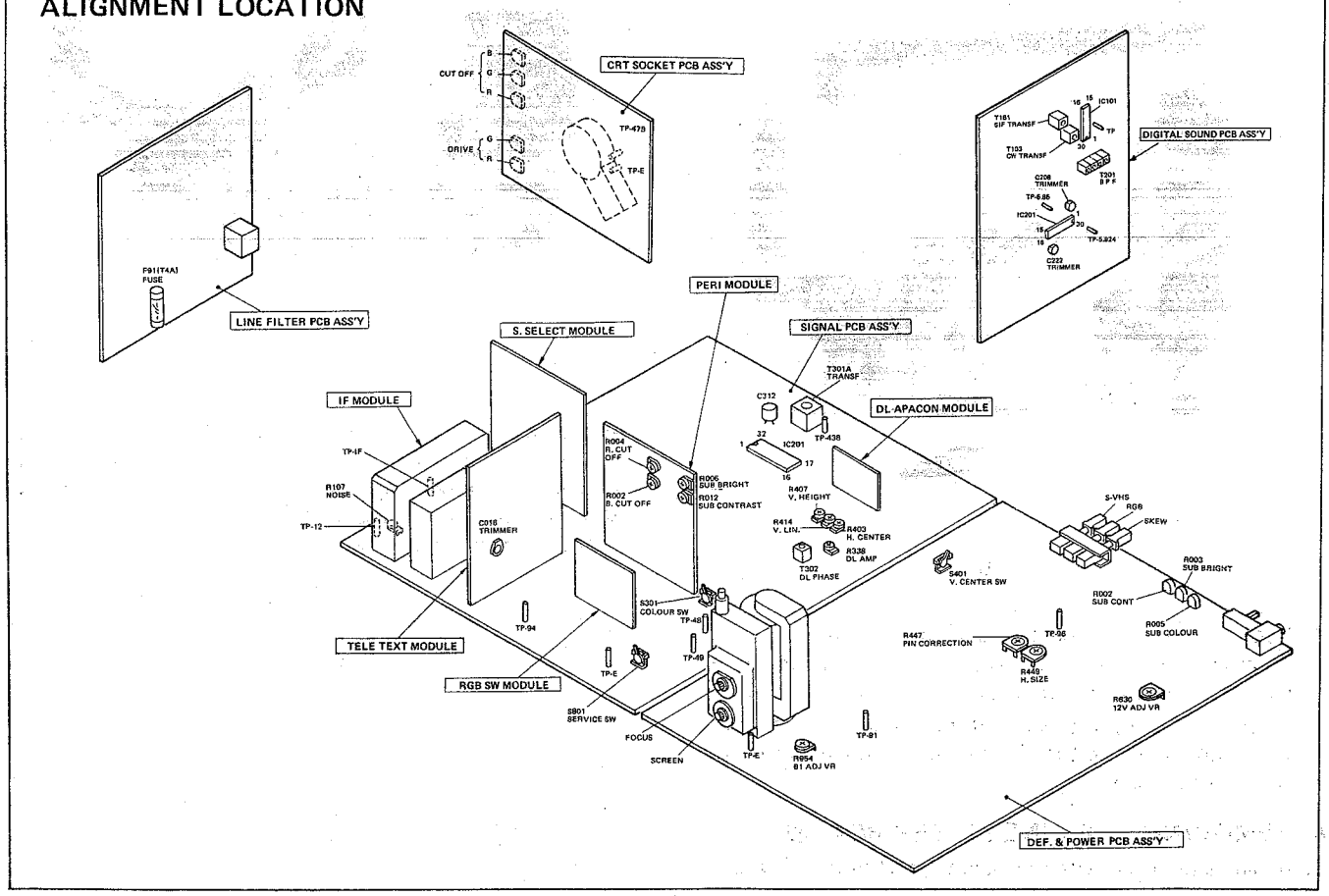
■ WIRE CLAMPING AND TYING BAND

1. Be sure to clamp the wire.
2. Never remove the tying band used for wire clamping. Should it be inadvertently removed, be sure to clamp the wire again, using insulating material.

SERVICE ADJUSTMENTS

● **As for the test points and respective volume adjusting positions, refer to the "ALIGNMENT LOCATION" on the schematic diagram and the SERVICE ADJUSTMENT in the given herein.**

ALIGNMENT LOCATION



DEF & POWER PC BOARD CIRCUIT

■ POWER SUPPLY

1. SUB power voltage (12V DC)
   Adjust the 12V ADJ VR to obtain 12V DC between TP-96 (+ side of C618) and TP-E(⏚).
2. B1 voltage (148V DC)
   Adjust the B1 ADJ VR to obtain 148V DC between TP-91 and TP-E(⏚).

■ SUB COLOUR

1. Receive a PAL colour bar signal.
2. Push the standard button and set the Video control to the standard position.
3. Adjust the SUB COLOUR VR to obtain natural colour density.

■ SUB BRIGHT & SUB CONTRAST

1. Push the standard button and set the Video control to the standard position.
2. Adjust the SUB BRIGHT VR and SUB CONTRAST VR until an ideal picture is obtained.

■ V. CENTER

The screen can be scrolled upward or downward by changing over the V. CENTER switch.

■ H. SIZE & PIN CORRECTION

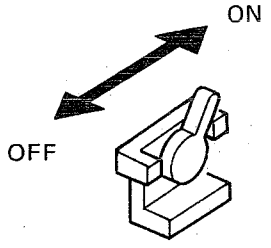
1. Adjust the SIDE PIN CORRECTION VR to obtain the least deformation of the screen.
2. Adjust the H. SIZE VR to move the screen horizontally and obtain the optimum screen with the whole image.

■ FOCUS

Adjust the FOCUS VR for best overall definition and picture detail at normal brightness and contrast.

SIGNAL PC BOARD CIRCUIT

■ COLOUR SW. POSITION



ON : COLOUR Position
OFF : MONO Position

■ NOISE (RF A.G.C. Delay)

This control is set at the factory and rarely requires adjustment. If a snowly picture appears on a medium- to weak signal station, adjust the NOISE VR.

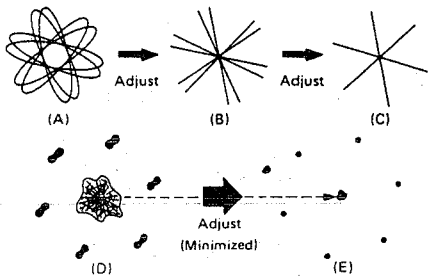
1. Turn NOISE VR fully couterclockwise (or clockwise) to obtain maximum noise in picture.
2. Slowly turn NOISE VR clockwise (or counterclockwise) until snow or noise in picture disappears.

● **NOTE**
Check operation on strong channels. If overloading occurs (bending, poor colour, loss of colour sync. etc.) make compromise adjustment.

■ CHROMA CIRCUIT

● PAL

1. Receive a PAL colour bar signal and set the oscilloscope at the X-Y mode and then connect CH-1 (X-axis) to TP-49 and CH-2 (Y-axis) to TP-48 respectively.
2. Short the C312 capacitor with a jumper wire and connect pin (24) and pin (26) of IC201 with 8.2 kΩ resistor. See Lissajous' Fig. (A).
3. Adjust the SUB COLOUR VR so that the figure is not saturated.
4. Adjust the DL AMP VR (R338) so that the figure is altered to (B) from (A).
5. Adjust the DL P TRANSF (T302) so that the figure is altered to (C) from (B).
6. Repeat adjustments 4. and 5. more than twice.
7. Remove the shorted jumper wire and 8.2 kΩ resistor from pin (24) and pin (26) of IC201.
8. Then adjust the T301A TRANSF (T301A: Burst cleaning) so that the figure is minimized to (E) from (D).



■ VERTICAL HEIGHT & LINEARITY

1. Set colour bar generator to crosshatch or a pattern with which symmetry can be checked.
2. Reduce the vertical size with the VERTICAL HEIGHT VR.
3. Adjust the vertical symmetry with the VERTICAL LINEARITY VR.
4. Readjust the VERTICAL HEIGHT so that the picture extends to normal size.

■ H. CENTER

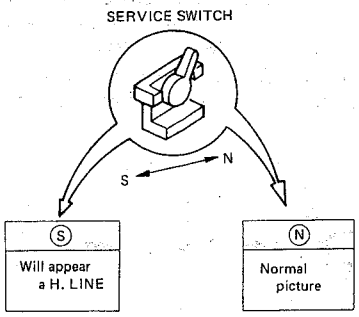
1. The screen can be scrolled leftward or rightward by adjusting the H. CENTER VR.

WHITE BALANCE ADJUSTMENT (Black and White Tracking)

1. Display a monochrome pattern.
2. Set the RED and GREEN DRIVE VRs for their mechanical center.
3. Turn the RED, GREEN and BLUE CUT-OFF VRs and the SCREEN VR fully counterclockwise.
4. Display a horizontal line. (Select the CUT-OFF SERVICE SWITCH from N to S and a HORIZONTAL LINE will appear.)
5. Turn SCREEN VR slowly clockwise until a very faint horizontal line appears.
6. Turn the CUT-OFF VR of the color which has appeared first, clockwise by about 10° and then adjust the SCREEN VR again so that the color may shine faintly.
7. Turn the other color CUT-OFF VRs slowly clockwise until a reasonable white line appears.
8. Return the monochrome pattern. (When returning a monochrome pattern select the CUT-OFF SERVICE SWITCH from S to N and a monochrome pattern will appear.)
9. Adjust the RED and GREEN DRIVE VRs for best white highlights.

• HORIZONTAL LINE

HOW TO USE THE CUT-OFF SERVICE SWITCH



PERI MODULE CIRCUIT

■ PERI SUB BRIGHT & SUB CONTRAST

While connecting PERI input in the A/V TERMINAL Board.

1. Push the standard button and set the Video control to the standard position.
2. Then align the PERI SUB BRIGHT VR & SUB CONTRAST VR until an ideal Picture is obtained.

■ PERI B. CUT OFF & R. CUT OFF

While connecting PERI input, adjust the BLUE CUT OFF VR AND RED CUT OFF VR in the PERI circuit until a best White picture is obtained.

TELETEXT MODULE CIRCUIT

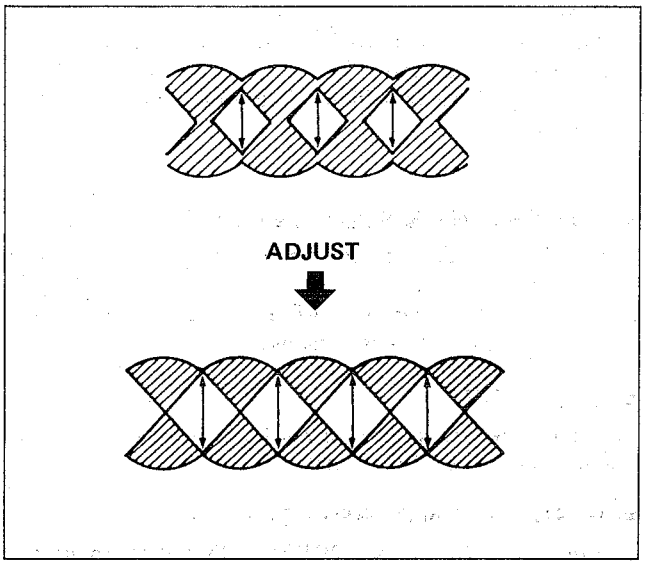
■ ON SCREEN (TELETEXT)

1. Set to the mix mode (by remote control).
2. Display characters on the screen.
3. Adjust the position of characters so that they will stay around the center of the screen and will not flow (C016).

DIGITAL SOUND PC BOARD CIRCUIT

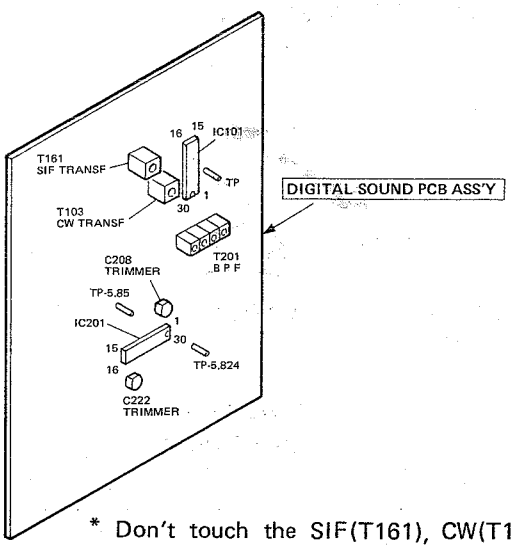
■ ADJUSTMENT OF EYE PATTERN

1. Receive a digital sound signal.
2. Connect the oscilloscope to pin ⑳ of IC201.
3. By observing the waveform, adjust the trimmer capacitor (C208) so that the EYE PATTERN is open to its maximum.
4. As for pin ⑲ of IC201, confirm the waveform by adjusting the TRIMMER capacitor (C208), if necessary.



■ ADJUSTMENT OF 5.824MHz

1. Receive a digital sound signal.
2. Connect pin ⑫ of IC201 to pin ㉑ using a jumper wire.
3. Then connect pin ④ of IC201 to pin ⑤ using a capacitor (0.001μF).
4. Connect the frequency counter to TP-5.824 and adjust the TRIMMER capacitor (C222) so that the frequency becomes 5.824MHz ±20Hz.



* Don't touch the SIF(T161), CW(T103) and BPF(T201) Transformer.

REPLACEMENT PARTS LIST

* The module PC boards marked with ◎ are supplied as assemblies.

■ MAIN REPLACEMENT PARTS LIST

1/3

SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
CRT & TUNER				
	⚠	CE41363-002	DEG COIL	L01
TU1001		BK7362EP-A04	V/U/CATV TUNER	
	⚠	A59EAK01X01	PICTURE TUBE	V01 Within Def Yoke PC Magnet, Wedge Ass'y
VARIABLE RESISTOR				
R1107		QVPA601-223A	V R (NOISE)	22kΩ B
R1338		QVPA601-102A	V R (DL AMP)	1kΩ B
R1403		QVPA801-203M	V R (H. CENTER)	20kΩ B
R1407		QVPA801-201M	TRIM R (V. HEIGHT)	200 Ω B
R1414		QVPA801-503M	TRIM R (V. LIN)	50kΩ B
R2002		QVPA603-103A	V R (SUB CONTRAST)	10kΩ B
R2003		QVPA603-223A	V R (SUB BRIGHT)	22kΩ B
R2005		QVPA603-223A	V R (SUB COLOR)	22kΩ B
R2447		QVPA804-203M	V R (SIDE PIN CORRECTION)	20kΩ B
R2449		QVPA804-502M	V R (H. SIZE)	5kΩ B
R2630		QVPA803-201M	V R (12V ADJ.)	200 Ω B
R2954		QVPE804-102H	V R (B1 ADJ.)	1kΩ B
R3113		QVPA803-502M	V R (R CUT OFF)	5kΩ B
R3114		QVPA803-502M	V R (G CUT OFF)	5kΩ B
R3115		QVPA803-502M	V R (B CUT OFF)	5kΩ B
R3119		QVPA803-201M	V R (R DRIVE)	200 Ω B
R3120		QVPA803-201M	V R (G DRIVE)	200 Ω B
TRANSFORMER				
T2501		CE40895-00A	H DRIVE TRANSF.	
	⚠	CE41479-00C	H. V. TRANSF.	T2551
T2601	⚠	CE41476-00A	SW TRANSF	
T2901	⚠	CE41491-00C	SW TRANSF	
T2902	⚠	CE40361-00J	DRIVE TRANSF.	
DIODE				
D1001		MA4051 (L) -Y	ZENER DIODE	
D1402		MA4120 (M) -Y	ZENER DIODE	
D1504		MA4075 (H) -Y	ZENER DIODE	
D1506		MA4030 (M) -Y	ZENER DIODE	
D1602		RD33E (B1)	ZENER DIODE	
D1603		RD33E (B1)	ZENER DIODE	
D1718		MA4051 (L) -Y	ZENER DIODE	
D1751		GL-9PR26	L. E. D.	Main Power
D1752		GL-9PG26	L. E. D.	On Timer
D1753		GL8HS26T	L. E. D.	Off Timer
D1754		GL-9PG26	L. E. D.	AFC
D1756		GL-9PR26	L. E. D.	Stereo
D1757		GL-9PG26	L. E. D.	II (Bilingual)
D1758		GL8HS26T	L. E. D.	I (Mono)
D1759		GL-9PR26	L. E. D.	Stereo
D1760		GL8HS26T	L. E. D.	I
D1761		GL-9PG26	L. E. D.	II
D1781		PD49PI	PHOTO DIODE	II
D1810		RD5.1ES (B2)	ZENER DIODE	
D2401		MA4300-Y	ZENER DIODE	
D2531		MA4056 (M) -Y	ZENER DIODE	
D2532		MA4062 (H) -Y	ZENER DIODE	
D2553		U19E-FK	SI. DIODE	
D2554		U19E-FK	SI. DIODE	
D2555		DFA1A4-4	SI. DIODE	
D2572	⚠	MA4068 (N) V1-Y	ZENER DIODE	
D2573		MA4091 (M) -Y	ZENER DIODE	
D2575		MA4062 (M) -Y	ZENER DIODE	
D2576		RD15E (B)	ZENER DIODE	
D2607		RD9.1E (B)	ZENER DIODE	

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SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
DIODE				
D2609		RD30E (B2)	ZENER DIDOE	
D2614		RD36E (B3)	ZENER DIODE	
D2901		D3SBA60	DIODE BRIDGE	
D2902		SF5J42	THYRISTOR	
D2958		MA4150 (M) -Y	ZENER IDODE	
D2959		RD5.6E (B2)	ZENER DIODE	
D6901		RD11E (B2) -Y	ZENER DIODE	
TRANSISTOR				
Q3104		2SC2068-LB	SI. TRANSISTOR	R. Out
Q3105		2SC2068-LB	SI. TRANSISTOR	G. Out
Q3106		2SC2068-LB	SI. TRANSISTOR	B. Out
IC				
IC1001		UPC1486C	I. C. (M)	
IC1201		M52016SP	I. C. (M)	
IC1601		TA7764P	I. C.	
IC1602		TA8200AH	I. C. (M)	
IC1701		AN78L05	I. C. (M)	
IC1702		MN15221JMN	I C	
IC1781		UPC1373HA (MS)	I. C. (M)	
IC2401		UPC1498H	I C	
IC2551		UPC7812HF	I. C.	
IC2552		UPC7805HF	I. C.	
IC2601		STR10006-A	I. C. (H)	
IC2951		AN5900	I. C. (M)	
IC7001		TC4066BP	I. C. (M)	
IC7002		TC4066BP	I. C. (M)	
IC7003		TC4066BP	I. C. (M)	
IC7101		TC4066BP	I. C. (M)	
IC7102		TC4066BP	I. C. (M)	
IC7103		TC4066BP	I. C. (M)	
IC7104		TC4066BP	I. C. (M)	
IC7201		TC4066BP	I. C. (M)	
IC7202		TC4066BP	I. C. (M)	
OTHERS				
		SBY-F002A-MU4	I-F MODULE	◎
		SBY-M005A (U)	S. SELECT MODULE	◎
		SBY-P006A (U)	PERI MODULE	◎
		SBY-T002A (U)	TELETEXT MODULE	◎
		SBY-R002A (U)	RGB SWITCH MODULE	◎
		SBY-D001A (U)	D.L APACON MODULE	◎
		CM33567-A0B	KNOB BASE ASSY	Include Power Knob Ch Knob, Vol Knob
	⚠	QMP4090-200K	POWER CORD	
		CM41678-B01	PUSH KNOB	(×5)
		CM11406-B0D-E	CABINET ASSY	
		CM32865-B01	CONTROL KNOB	
		CM33485-A01	CONTROL KNOB	
		CM11468-D0A	SP BOX ASSY	
		EAS-10P432C	CONE SPEAKER	
		EAS-3FP10R	CONE SPEAKER	
		CM33501-A0C-V0	AV TERMINAL	Include Antenna Jack
		CM11468-C0B	SP BOX ASSY	
		CM42758-003	KNOB	(×2)
CP2601	⚠	ICP-N38-Y	IC PROTECTER	
CP2901	⚠	ICP-N38-Y	IC PROTECTER	
F9091	⚠	QMF51E2-4R0S	FUSE	4.0A
J2001		AX49607-004	HEADPHONE JACK	
J7001		CE40529-006	SCART CONNECTOR	Peri 1

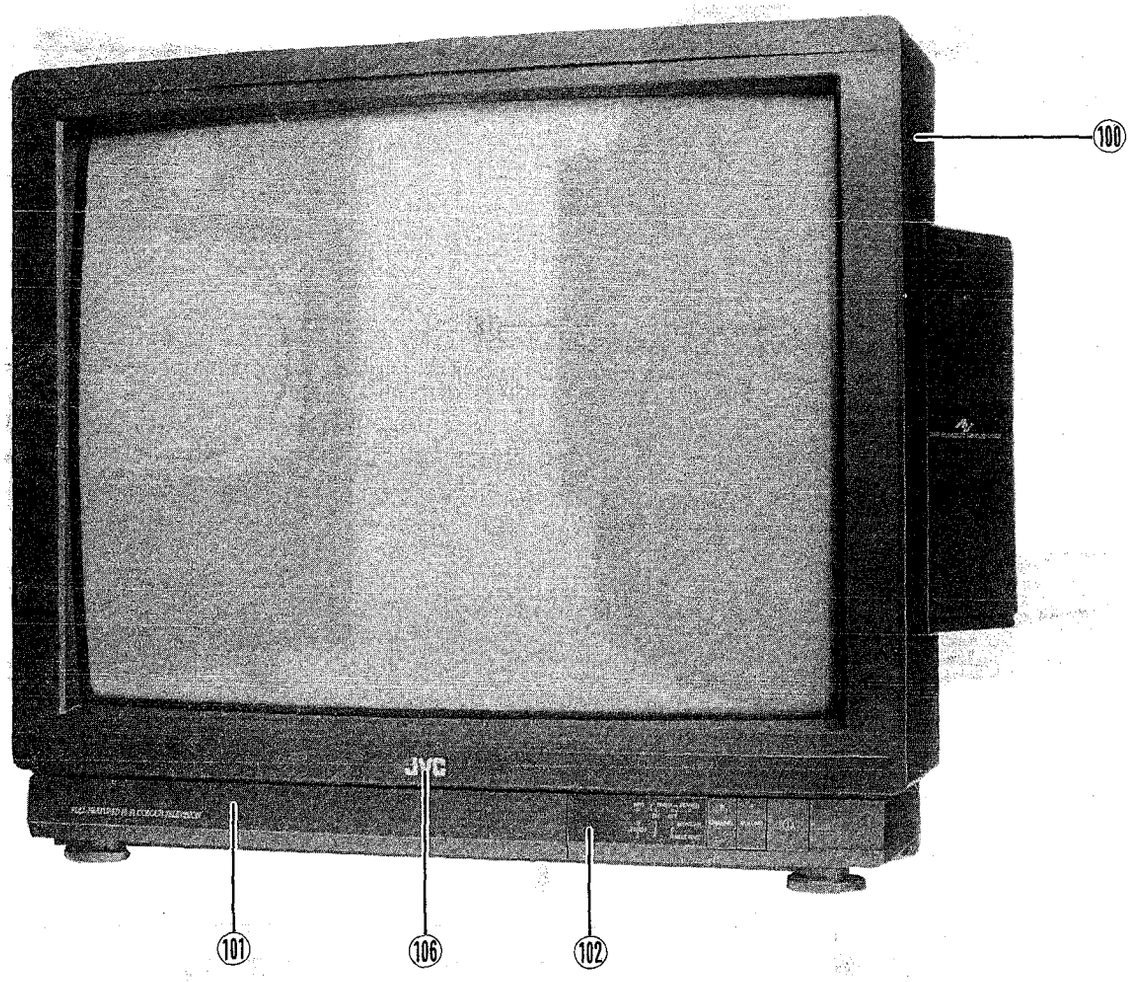
3/3

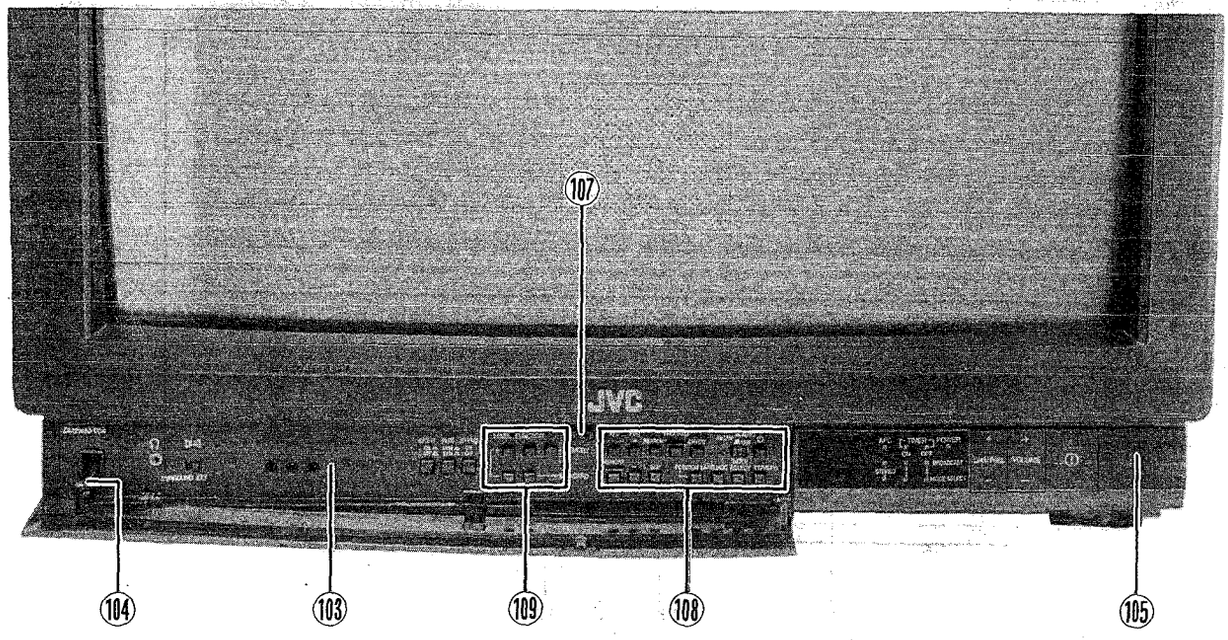
SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
OTHERS				
J7002		CE40529-006	SCART CONNECTOR	Peri 2
J7003		QMD4A04-001	DIN CONNECTOR	S In
J7004		CEMN021-001	PIN JACK	Audio In
J7005		CEMN021-001	PIN JACK	TV Audio Out
J7006		CEMT005-001	SP TERMINAL	SP Out
R2571	⚠	QRH017J-4R7M	F R	4.7 Ω 1W J
R2611	⚠	QRZ0054-8R2M	F R	8.2 Ω 1/4W J
R2623	⚠	QRZ0054-2R2M	F R	2.2 Ω 1/4W J
R2632	⚠	QRZ0054-2R2M	F R	2.2 Ω 1/4W J
R2633	⚠	QRZ0054-2R2M	F R	2.2 Ω 1/4W J
R2959	⚠	QRZ0055-2R2M	F R	2.2 Ω 1/2W J
R6500	⚠	QRZ0054-470M	F R	47 Ω 1/4W J
S1301		QSL4A13-C02	LEVER SWITCH	Color
S1751		QSP2C22-C01	PUSH SWITCH	Nor⟷Auto
S1753		QSP1A11-C10	PUSH SWITCH	TV/Video
S1754		QSP1A11-C10	PUSH SWITCH	I/II
S1755		QSP1A11-C10	PUSH SWITCH	Power
S1756		QSP1A11-C10	PUSH SWITCH	Program
S1757		QSP1A11-C10	PUSH SWITCH	Memory
S1758		QSP1A11-C10	PUSH SWITCH	Fine△
S1759		QSP1A11-C10	PUSH SWITCH	Fine▽
S1760		QSP1A11-C10	PUSH SWITCH	CH/CATV
S1761		QSP1A11-C10	PUSH SWITCH	Position
S1762		QSP1A11-C10	PUSH SWITCH	Search
S1763		QSP1A11-C10	PUSH SWITCH	AFC
S1765		QSP1A11-C10	PUSH SWITCH	Language
S1767		QSP1A11-C10	PUSH SWITCH	Skip
S1768		QSP1A11-C10	PUSH SWITCH	CH△
S1769		QSP1A11-C10	PUSH SWITCH	CH▽
S1770		QSP1A11-C10	PUSH SWITCH	Vol△
S1771		QSP1A11-C10	PUSH SWITCH	Vol▽
S1801		QSL4A13-C02	LEVER SWITCH	Service
S1901	⚠	QSP4D21-C06	PUSH SWITCH	Power
S2001		QST3321-C01	PUSH SWITCH	Skew, RGB, S-VHS
S2003		QSS4C22-C04	SLIDE SWITCH	Speaker
S2006		QSP1A11-C10	PUSH SWITCH	Standard
S2007		QSP1A11-C10	PUSH SWITCH	Level△
S2008		QSP1A11-C10	PUSH SWITCH	Level▽
S2009		QSP1A11-C10	PUSH SWITCH	Function
S2010		QSP1A11-C10	PUSH SWITCH	Memory
S2401		QSL4A13-C02	LEVER SWITCH	V. Center
TH2441		ERT-D2ZHL503S	THERMISTOR	
TH9091	⚠	A76038-T	POSISTOR	orA76038
X1301		CE41115-001	CRYSTAL	
X1501		CSB500F9	CERAMIC RESO	
X1701		CE40842-001	CRYSTAL	

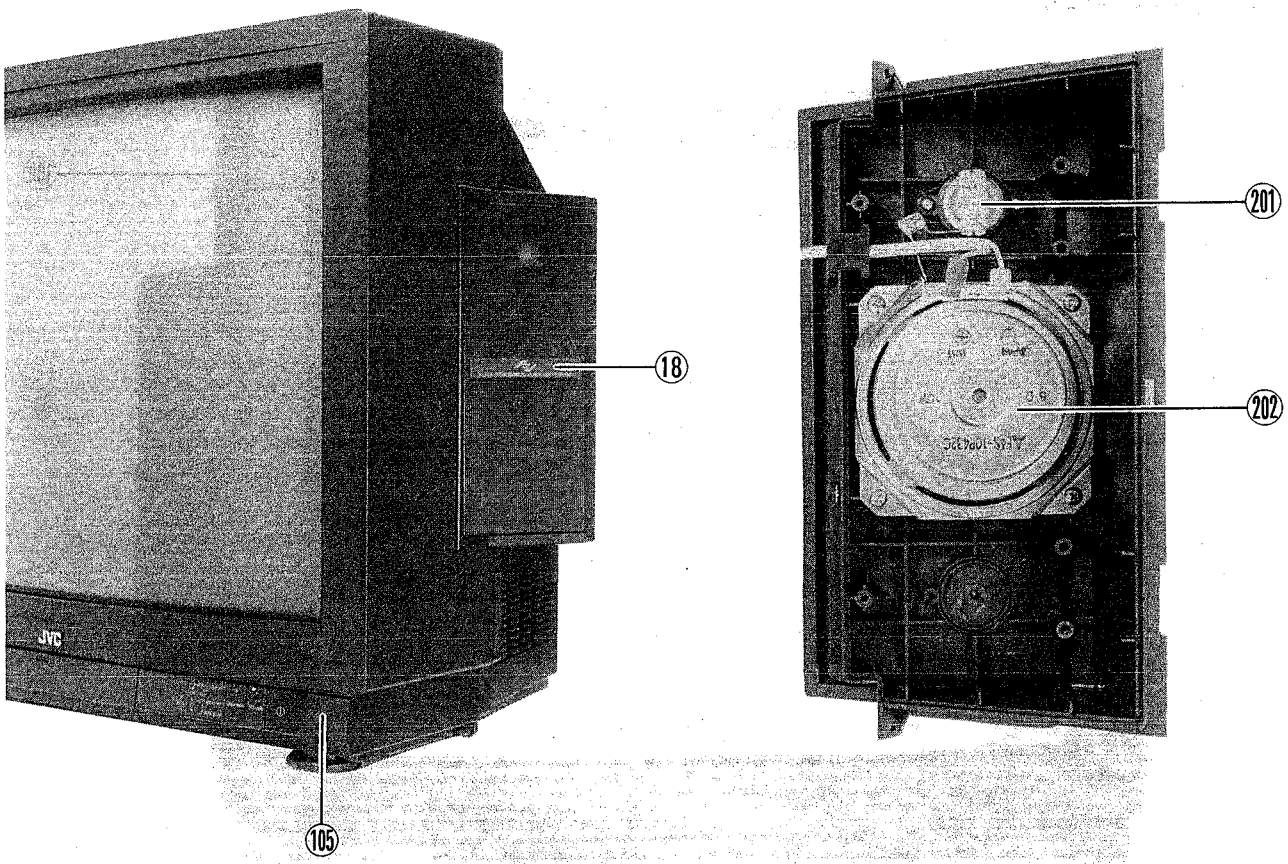
■ CHASSIS & CABINET PARTS LIST

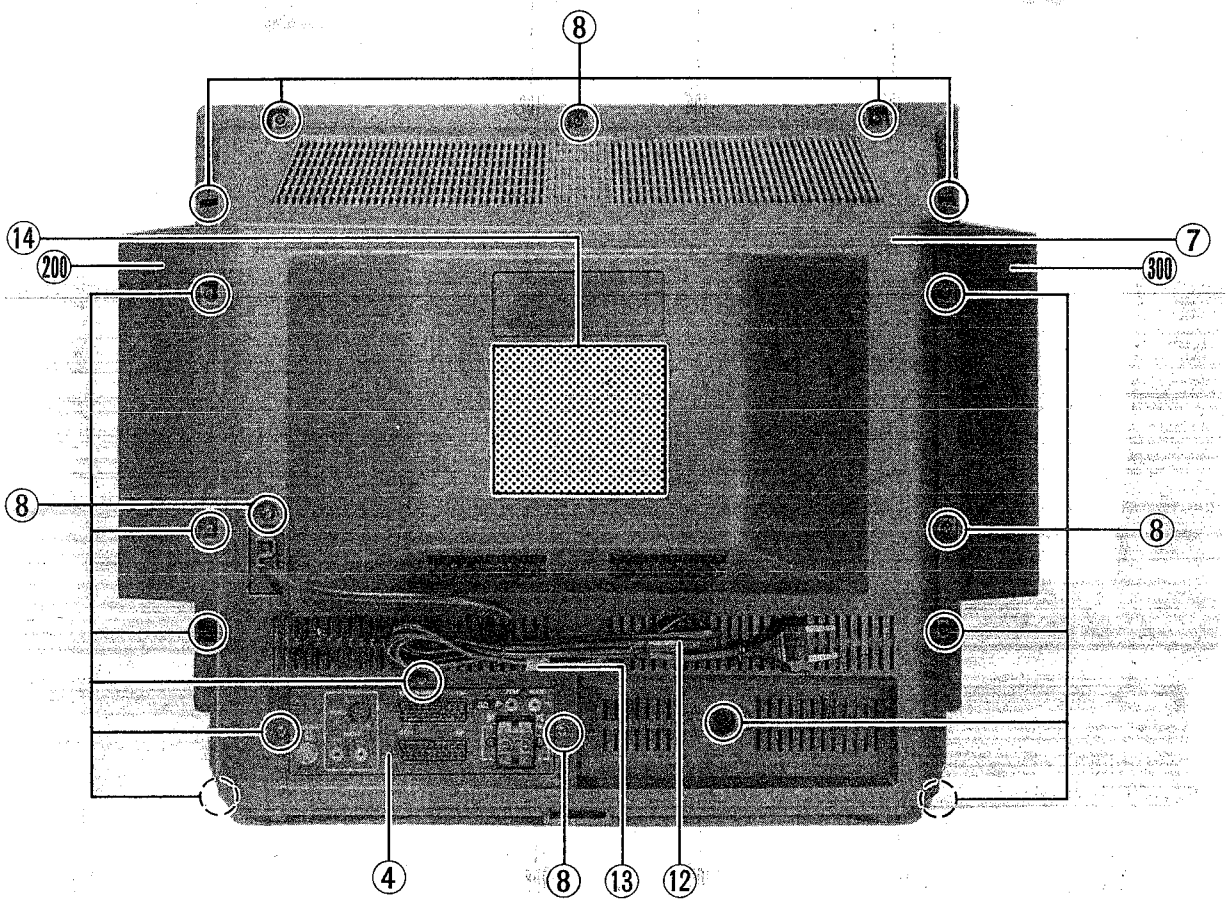
VIEW NO.	PART NO.	PART NAME	REMARKS
⚠ 1	A59EAK01X01	PICTURE TUBE	V01 Within Def Yoke PC Magnet, Wedge Ass'y
⚠ 2	CE41363-002	DEG COIL	L01
3	CM21450-C01-E	CONTROL BASE	
4	CM33501-A0C-V0	AV TERMINAL	Include Antenna Jack
5	CH41987-00C	BRAIDED SUB ASSY	(×2)
6	CH30342-00G	BRAIDED ASSY	
7	CM11409-A01-E	REAR COVER	
8	GBSA4016M	TAP SCREW	(×18) Rear Cover
9	CM41677-A01	KNOB CAP	
⚠ 10	CE41479-00C	H. V. TRANSF.	T2551
11	CM21165-001-V0	POWER CORD CLAMP	
⚠ 12	QMP4090-200K	POWER CORD	
13	N47971	CORD CLAMP	
14	CM21117-006 (R)	ROLL R LABEL	
15	CM33567-A0B	KNOB BASE ASSY	Include Power Knob, Ch Knob, Vol Knob
16	CM41678-B01	PUSH KNOB	(×3)
17	SBSB3012M	TAP SCREW	(x4) Pin Jack, SP Terminal
18	CM32861-001	PLATE	
100	CM11406-B0D-E	CABINET ASSY	Include No. 101-110
101	CM11472-B02	DOOR	
102	CM32857-B04	INDICATOR WINDOW	
103	CM21453-004	CONTROL SHEET	
104	CM32812-A0A	DUMPER ASSY	
105	CM32858-A01-E	SIDE PANEL	
106	CM43094-002	JVC MARK	
107	CM45436-00A	DOOR LATCH	
108	CM32865-B01	CONTROL KNOB	
109	CM33485-A01	CONTROL KNOB	
110	CM44258-00A	PLASTIC RIVET	(×6)
200	CM11468-D0A	SP BOX ASSY	Include No. 201-202
201	EAS-3FP10R	CONE SPEAKER	
202	EAS-10P432C	CONE SPEAKER	
300	CM11468-C0B	SP BOX ASSY	Include No. 201-202

■ EXPLODED VIEW

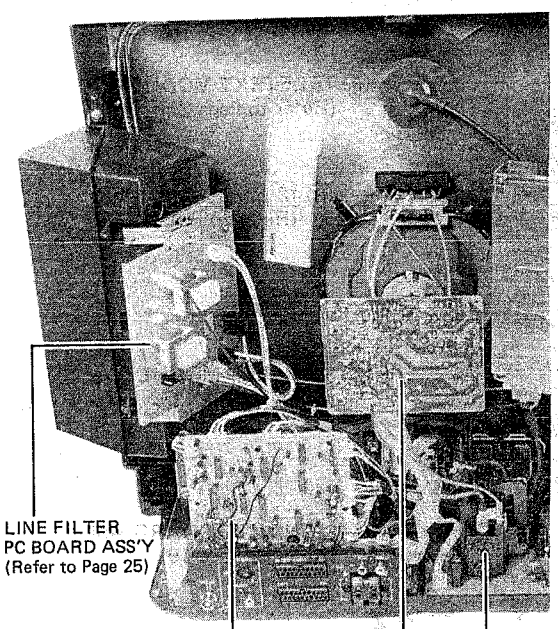


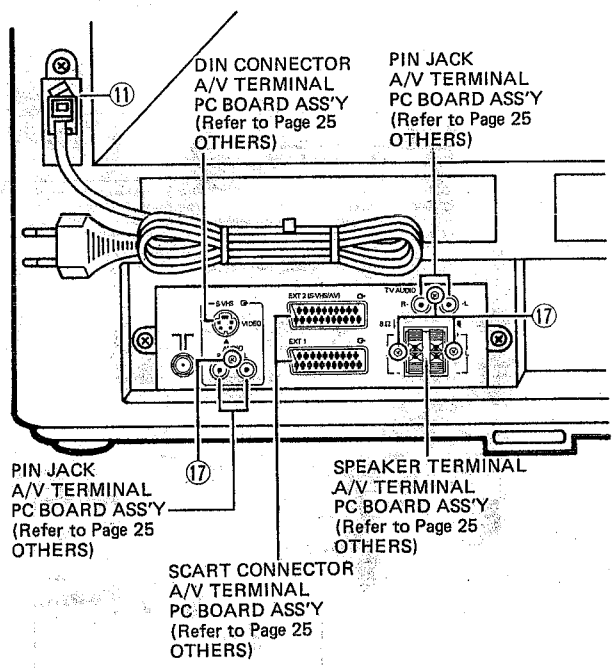


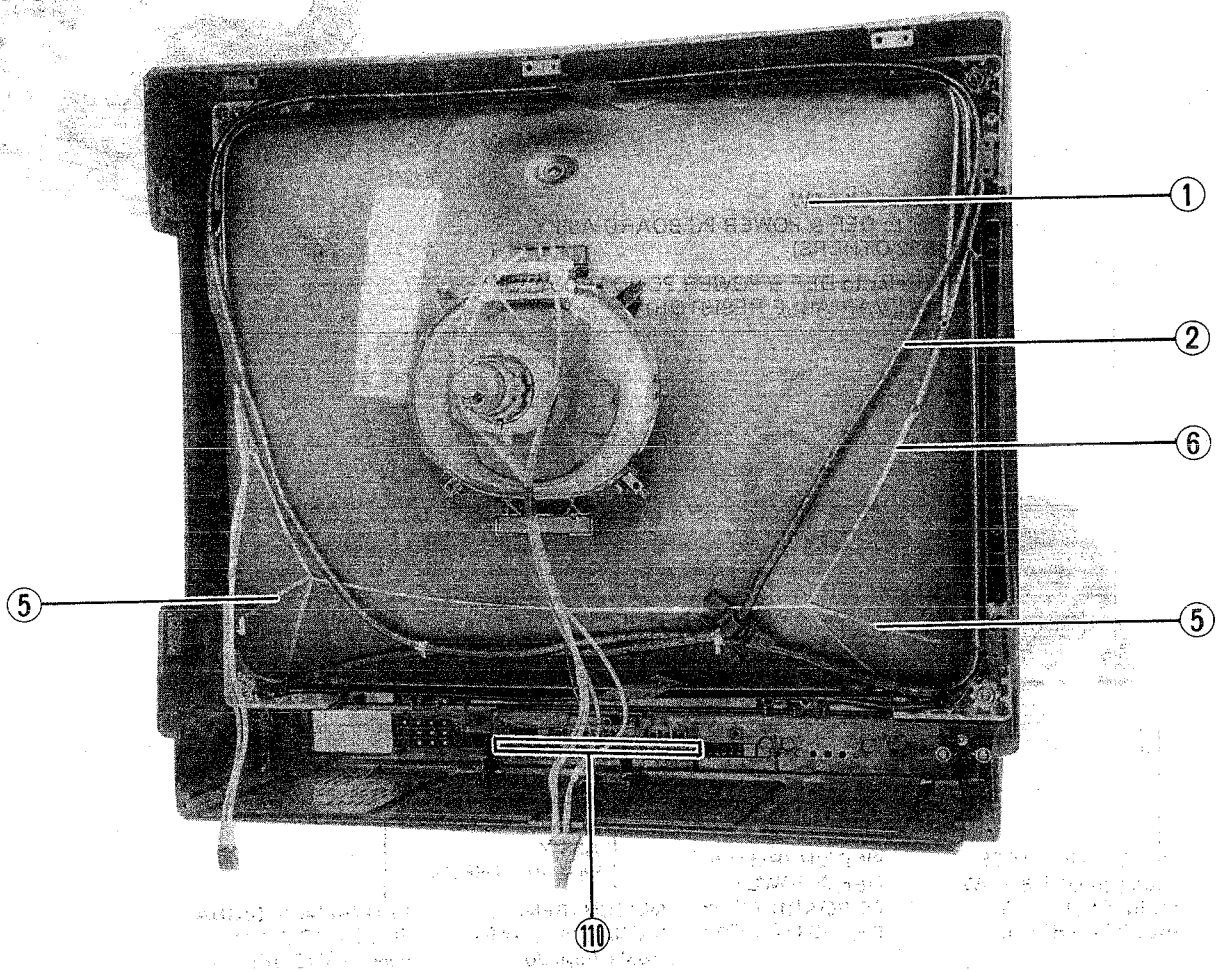




(Include
ANTENNA JACK)


LINE FILTER
PC BOARD ASS'Y
(Refer to Page 25)
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 24)
CRT SOCKET
PC BOARD ASS'Y
(Refer to Page 23)
⑩


⑪
DIN CONNECTOR
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 25
OTHERS)
PIN JACK
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 25
OTHERS)
⑰
⑰
PIN JACK
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 25
OTHERS)
SPEAKER TERMINAL
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 25
OTHERS)
SCART CONNECTOR
A/V TERMINAL
PC BOARD ASS'Y
(Refer to Page 25
OTHERS)


①
②
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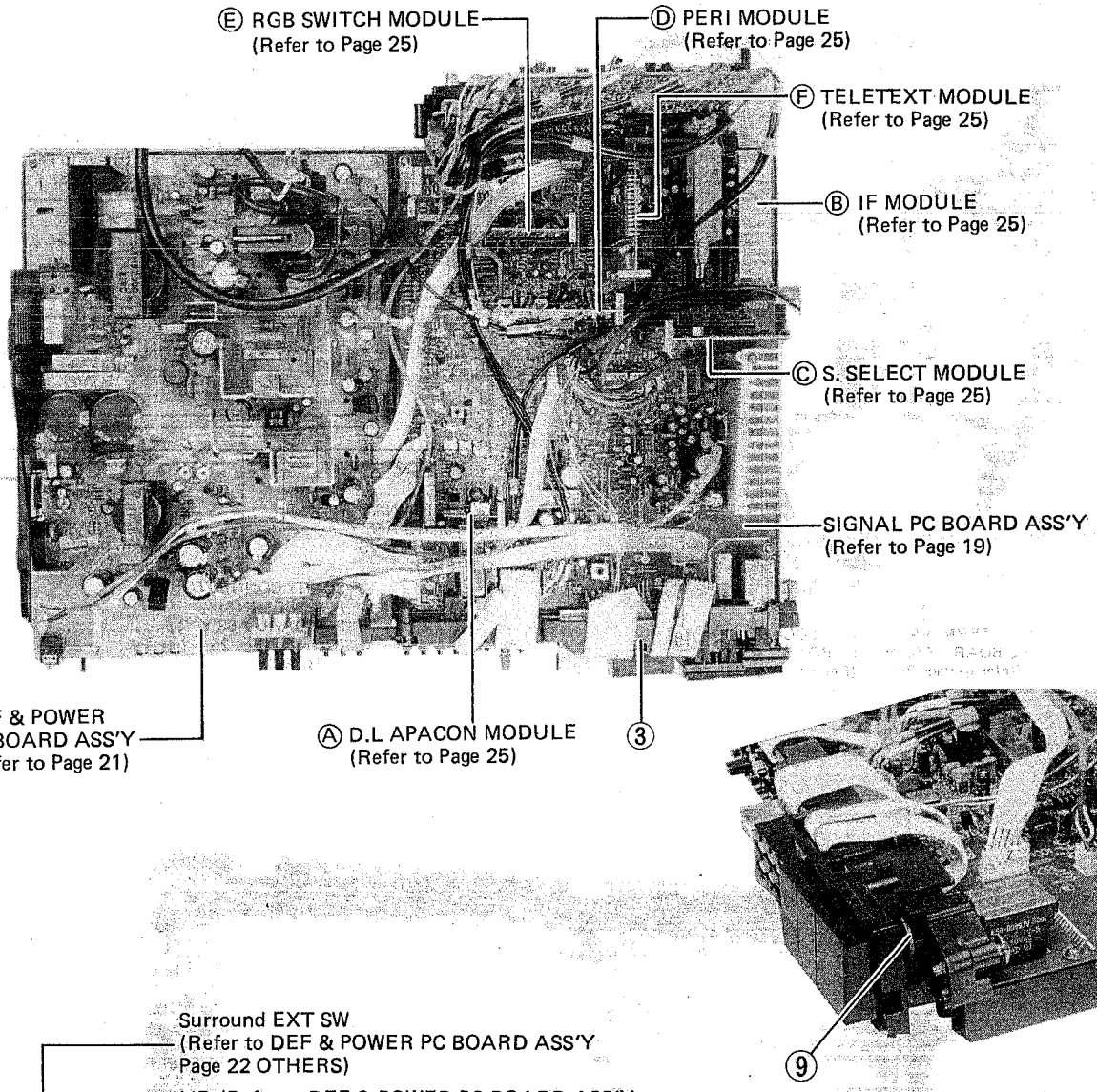
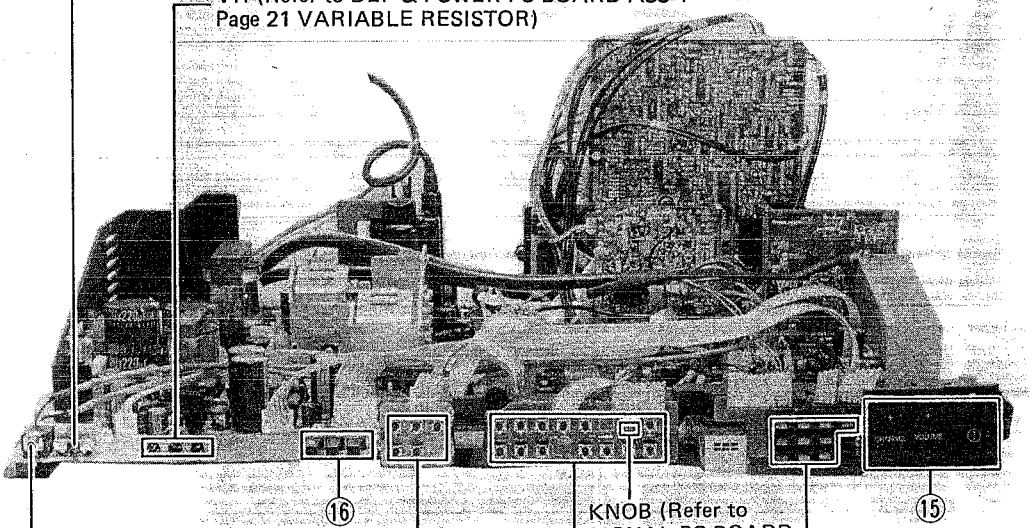

Ⓔ RGB SWITCH MODULE
(Refer to Page 25)
Ⓓ PERI MODULE
(Refer to Page 25)
Ⓕ TELETEXT MODULE
(Refer to Page 25)
Ⓑ IF MODULE
(Refer to Page 25)
Ⓒ S. SELECT MODULE
(Refer to Page 25)
SIGNAL PC BOARD ASS'Y
(Refer to Page 19)
DEF & POWER
PC BOARD ASS'Y
(Refer to Page 21)
Ⓐ D.L APACON MODULE
(Refer to Page 25)
3
9


Surround EXT SW
(Refer to DEF & POWER PC BOARD ASS'Y
Page 22 OTHERS)
VR (Refer to DEF & POWER PC BOARD ASS'Y
Page 21 VARIABLE RESISTOR)
16
15
HEADPHONE JACK
(Refer to DEF & POWER
PC BOARD ASS'Y
Page 22 OTHERS)
SWITCH (Refer to
DEF & POWER
PC BOARD ASS'Y
Page 22 OTHERS)
KNOB (Refer to
SIGNAL PC BOARD
ASS'Y
Page 20 OTHERS)
SWITCH (Refer to
SIGNAL PC BOARD
ASS'Y Page 20
OTHERS)
LED (Refer to SIGNAL
PC BOARD ASS'Y
Page 19 DIODE)

■ PC BOARD PARTS LIST
SIGNAL PC BOARD ASS'Y (SBY-1304A(U))

1/4

SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE RESISTOR			
R1107	QVPA601-223A	V R (NOISE)	22kΩ B
R1338	QVPA601-102A	V R (DL AMP)	1kΩ B
R1403	QVPA801-203M	V R (H. CENTER)	20kΩ B
R1407	QVPA801-201M	TRIM R (V. HEIGHT)	200 Ω B
R1414	QVPA801-503M	TRIM R (V. LIN)	50kΩ B
RESISTOR			
R1004	QRG019J-121S	OM R	120 Ω 1W J
R1865	QRG019J-271	OM R	270 Ω 1W J
CAPACITOR			
C1001	QEM61EK-106MZ	E CAP.	10μF 25V K
C1003	QEM61EK-106MZ	E CAP.	10μF 25V K
C1006	QEM61EK-106MZ	E CAP.	10μF 25V K
C1105	QEB61HM-104MZ	E CAP.	0.1μF 50V M
C1205	QEN61HM-474Z	BP E CAP.	0.47μF 50V M
C1214	QEN61HM-335Z	BP E CAP.	3.3μF 50V M
C1309	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C1310	QEN61HM-105Z	BP E CAP.	1μF 50V M
C1312	QEN61HM-105Z	BP E CAP.	1μF 50V M
C1401	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J
C1402	QEE61CK-225BZ	TAN. CAP.	2.2μF 16V K
C1404	QEB61HM-224MZ	E CAP.	0.22μF 50V M
C1405	QEM51HK-475M	E CAP.	4.7μF 50V K
C1412	QEM51CM-477M	E CAP.	470μF 16V M
C1414	QFV71HJ-274MZ	TF CAP.	0.27μF 50V J
C1416	QEM51HK-475M	E CAP.	4.7μF 50V K
C1506	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C1605	QFV71HJ-334MZ	TF CAP.	0.33μF 50V J
C1613	QFV71HJ-334MZ	TF CAP.	0.33μF 50V J
C1628	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J
C1629	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J
C1716	QETC1CM-106Z	E CAP.	10μF 16V M
C1781	QFV71HJ-333MZ	TF CAP.	0.033μF 50V J
C1782	QEKC1CM-106GMZ	E CAP.	10μF 16V M
C1783	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C1784	QEKC1CM-106GMZ	E CAP.	10μF 16V M
C1785	QEKC1CM-336MZ	E CAP.	33μF 16V M
C1820	QEN61HM-105Z	BP E CAP.	1μF 50V M
C1821	QEN61HM-105Z	BP E CAP.	1μF 50V M
C1822	QEN61HM-105Z	BP E CAP.	1μF 50V M
TRANSFORMER			
T1301A	CE40359	IDENT TRANSF	
T1302	CE40396-A01	DL P TRANSF	
T1781	CE40304-001	BP TRANSF	
COIL			
L1001	CELP006-5R6Z	PEAKING COIL	5.6μH
L1002	CELP006-5R6Z	PEAKING COIL	5.6μH
L1003	CELP006-5R6Z	PEAKING COIL	5.6μH
L1004	CELP006-120Z	PEAKING COIL	12μH
L1101	CELP006-8R2Z	PEAKING COIL	8.2μH
L1202	CELP006-390Z	PEAKING COIL	39μH
L1203	CE40041-390	PEAKING COIL	39μH
L1301	CELP006-120Z	PEAKING COIL	12μH
L1303	CELP006-8R2Z	PEAKING COIL	8.2μH
DIODE			
D1001	MA4051 (L) -Y	ZENER DIODE	
D1205	1SS133-Y	SI. DIODE	
D1306	1SS133-Y	SI. DIODE	
D1307	1SS133-Y	SI. DIODE	

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
DIODE			
D1308	1SS133-Y	SI. DIODE	
D1309	1SS133-Y	SI. DIODE	
D1310	1SS133-Y	SI. DIODE	
D1402	MA4120 (M) -Y	ZENER DIODE	
D1502	1SS133-Y	SI. DIODE	
D1503	1SS133-Y	SI. DIODE	
D1504	MA4075 (H) -Y	ZENER DIODE	
D1505	1SS133-Y	SI. DIODE	
D1506	MA4030 (M) -Y	ZENER DIODE	
D1507	1SS133-Y	SI. DIODE	
D1508	1SS133-Y	SI. DIODE	
D1509	1SS133-Y	SI. DIODE	
D1601	1SS133-Y	SI. DIODE	
D1602	RD33E (B1)	ZENER DIODE	
D1603	RD33E (B1)	ZENER DIODE	
D1609	1SS133	SI. DIODE	
D1701	1SS133-Y	SI. DIODE	
D1702	1SS133-Y	SI. DIODE	
D1704	1SS133-Y	SI. DIODE	
D1705	1SS133-Y	SI. DIODE	
D1706	1SS133-Y	SI. DIODE	
D1707	1SS133-Y	SI. DIODE	
D1708	1SS133-Y	SI. DIODE	
D1709	1SS133-Y	SI. DIODE	
D1710	1SS133-Y	SI. DIODE	
D1718	MA4051 (L) -Y	ZENER DIODE	
D1719	1SS133-Y	SI. DIODE	
D1751	GL-9PR26	L. E. D.	Main Power
D1752	GL-9PG26	L. E. D.	On Timer
D1753	GL8HS26T	L. E. D.	Off Timer
D1754	GL-9PG26	L. E. D.	AFC
D1756	GL-9PR26	L. E. D.	Stereo
D1757	GL-9PG26	L. E. D.	II (Bilingual)
D1758	GL8HS26T	L. E. D.	I (Mono)
D1759	GL-9PR26	L. E. D.	Stereo
D1760	GL8HS26T	L. E. D.	I
D1761	GL-9PG26	L. E. D.	II
D1781	PD49PI	PHOTO DIODE	
D1801	W06A-4	SI. DIODE	
D1804	1SS133-Y	SI. DIODE	
D1806	1SS133-Y	SI. DIODE	
D1807	1SS133-Y	SI. DIODE	
D1808	1SS133-Y	SI. DIODE	
D1810	RD5.1ES (B2)	ZENER DIODE	
D1811	1SS133	SI. DIODE	
TRANSISTOR			
Q1201	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1203	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1206	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1303	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1305	2SC1815 (BL) -Y	TRANSISTOR	
Q1306	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1501	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1502	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1503	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1504	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1505	2SK301 (P) -Y	F E T	
Q1506	2SC1815 (Y, GR) Y	SI. TRANSISTOR	

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
TRANSISTOR			
Q1507	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1601	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1602	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1701	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q1706	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1801	2SA673 (C) -Y	TRANSISTOR	
Q1802	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1803	2SC1815 (Y) -Y	SI. TRANSISTOR	
Q1804	2SC1815 (Y) -Y	SI. TRANSISTOR	
Q1805	2SC1815 (Y) -Y	SI. TRANSISTOR	
Q1807	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1808	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1809	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1810	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1811	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1812	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1813	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q1814	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1815	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q1816	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
IC			
IC1001	UPC1486C	I. C. (M)	
IC1201	M52016SP	I. C. (M)	
IC1601	TA7764P	I. C.	
IC1602	TA8200AH	I. C. (M)	
IC1701	AN78L05	I. C. (M)	
IC1702	MN15221JMN	I C	
IC1781	UPC1373HA (MS)	I. C. (M)	
OTHERS			
	SBY-F002A-MU4	IF MODULE	◎
	SBY-M005A (U)	S. SELECT MODULE	◎
	SBY-P006A (U)	PERI MODULE	◎
	SBY-T002A (U)	TELETEXT MODULE	◎
	SBY-R002A (U)	RGB SWITCH MODUL	◎
	SBY-D001A (U)	D. L APACON MODUL	◎
	CM42758-003	KNOB	
DL1201	CE41407-001	DELAY LINE	
DL1301	CE41489-001	1H DELAY LINE	
S1301	QSL4A13-C02	LEVER SWITCH	Color
S1751	QSP2C22-C01	PUSH SWITCH	Nor⟷Auto
S1753	QSP1A11-C10	PUSH SWITCH	TV/Video
S1754	QSP1A11-C10	PUSH SWITCH	I/II
S1755	QSP1A11-C10	PUSH SWITCH	Power
S1756	QSP1A11-C10	PUSH SWITCH	Program
S1757	QSP1A11-C10	PUSH SWITCH	Memory
S1758	QSP1A11-C10	PUSH SWITCH	Fine△
S1759	QSP1A11-C10	PUSH SWITCH	Fine▽
S1760	QSP1A11-C10	PUSH SWITCH	CH/CATV
S1761	QSP1A11-C10	PUSH SWITCH	Position
S1762	QSP1A11-C10	PUSH SWITCH	Search
S1763	QSP1A11-C10	PUSH SWITCH	AFC
S1765	QSP1A11-C10	PUSH SWITCH	Language
S1767	QSP1A11-C10	PUSH SWITCH	Skip
S1768	QSP1A11-C10	PUSH SWITCH	CH△
S1769	QSP1A11-C10	PUSH SWITCH	CH▽
S1770	QSP1A11-C10	PUSH SWITCH	Vol△
S1771	QSP1A11-C10	PUSH SWITCH	Vol▽
S1801	QSL4A13-C02	LEVER SWITCH	Service

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
OTHERS			
⚠ S1901	QSP4D21-C06	PUSH SWITCH	Power
TU1001	BK7362EP-A04	V/U/CATV TUNER	
X1301	CE41115-001	CRYSTAL	
X1501	CSB500F9	CERAMIC RESO	
X1701	CE40842-001	CRYSTAL	

DEF & POWER PC BOARD ASS'Y (SBY-2304A(U))

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE RESISTOR			
R2002	QVPA603-103A	V R (SUB CONTRAST)	10kΩ B
R2003	QVPA603-223A	V R (SUB BRIGHT)	22kΩ B
R2005	QVPA603-223A	V R (SUB COLOR)	22kΩ B
R2447	QVPA804-203M	V R (SIDE PIN CORRECTION)	20kΩ B
R2449	QVPA804-502M	V R (H. SIZE)	5kΩ B
R2630	QVPA803-201M	V R (12V ADJ.)	200 Ω B
R2954	QVPE804-102H	V R (B1 ADJ.)	1kΩ B
RESISTOR			
R2411	QRG019J-561S	OM R	560 Ω 1W J
R2414	QRG019J-471S	OM R	470 Ω 1W J
R2504	QRG029J-221A	OM R	220 Ω 2W J
R2506	QRG029J-471A	OM R	470 Ω 2W J
R2531	QRG029J-391A	OM R	390 Ω 2W J
⚠ R2553	QRX029J-1R8	MF R	1.8 Ω 2W J
R2554	QRX039J-1R8	MF R	1.8 Ω 3W J
R2555	QRX029J-3R3	MF R	3.3 Ω 2W J
R2556	QRX039J-6R8	MF R	6.8 Ω 3W J
R2557	QRG029J-220	OM R	22 Ω 2W J
⚠ R2572	QRV142F-6801	MF R	6.8kΩ 1/4W F
⚠ R2573	QRV142F-3241	MF R	3.24kΩ 1/4W F
R2605	QRG039J-563	OM R	56kΩ 3W J
R2607	QRG019J-680S	OM R	68 Ω 1W J
R2609	QRM055K-R56	MP R	0.56 Ω 5W K
R2613	QRG029J-560	OM R	56 Ω 2W J
R2614	QRG029J-223	OM R	22kΩ 2W J
R2616	QRG029J-152	OM R	1.5kΩ 2W J
R2626	QRG029J-152	OM R	1.5kΩ 2W J
R2903	QRF104J-100	UNF R	10 Ω 10W J
R2906	QRG029J-223A	OM R	22kΩ 2W J
R2907	QRG029J-223A	OM R	22kΩ 2W J
R2910	QRM055K-R22	MP R	0.22 Ω 5W K
R2912	QRF056J-681C	UNF R	680 Ω 5W J
R2913	QRF076J-102	UNF R	1kΩ 7W J
R2951	QRG029J-122A	OM R	1.2kΩ 2W J
R2957	QRG019J-331S	OM R	330 Ω 1W J
R2967	QRV142F-1502	MF R	15kΩ 1/4W F
R2971	QRG029J-151	OM R	150 Ω 2W J
R2972	QRG029J-121	OM R	120 Ω 2W J
R2974	QRG029J-153	OM R	15kΩ 2W J
R2981	QRM055K-R68	MP R	0.68 Ω 5W K
⚠ R2991	QRZ0057-825	C R	8.2MΩ 1W J
CAPACITOR			
C2406	QEHC1VM-107MZ	E CAP.	100μF 35V M
C2441	QFV71HJ-823MZ	TF CAP.	0.082μF 50V J
C2442	QFV71HJ-823MZ	TF CAP.	0.082μF 50V J
C2444	QEHC1AM-108MZ	E CAP.	1000μF 10V M
C2503	QEHC1HM-105MZ	E CAP.	1μF 50V M
C2504	QEHC1HM-476MZ	E CAP.	47μF 50V M
⚠ C2505	QFZ0081-1001S	MPP CAP.	1000pF 1600V ±3%
⚠ C2506	QFZ0081-9201S	MPP CAP.	9200pF 1600V ±3%
C2507	QFP32GJ-223M	PP CAP.	0.022μF 400V J
C2509	QFZ0059-254S	MPP CAP.	0.25μF 400V K
C2574	QFV81HJ-104M	TF CAP.	0.1μF 50V J
C2608	QEH52AM-106M	E CAP.	10μF 100V M
C2609	QCZ0122-152A	C CAP.	1500pF 2kV K
C2611	QEM61HK-225MZ	E CAP.	2.2μF 50V K
C2613	QEM61EK-106MZ	E CAP.	10μF 25V K

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
CAPACITOR			
C2618	QEHC1CM-108MZ	E CAP.	1000μF 16V M
C2626	QEHC1VM-227MZ	E CAP.	220μF 35V M
C2627	QEN61CM-106Z	BP E CAP.	10μF 16V M
C2901	QCZ9034-472A	C CAP.	4700pFAC400V P
C2902	QCZ9034-472A	C CAP.	4700pFAC400V P
C2903	QCZ9034-472A	C CAP.	4700pFAC400V P
C2904	QCZ0122-471U	C CAP.	470pF 2kV K
C2906	QEZ0084-227R	E CAP.	220μF 400V M
C2907	QEZ0084-227R	E CAP.	220μF 400V M
C2910	QCZ0122-561A	C CAP.	560pF 2kV K
C2912	QCZ0122-821U	C CAP.	820pF 2kV K
C2916	QEHC1EM-476MZ	E CAP.	47μF 25V M
C2917	QEHC1EM-476MZ	E CAP.	47μF 25V M
C2966	QFP31HG-302SZ	PP CAP.	3000pF 50V G
C2967	QEM51CK-107M	E CAP.	100μF 16V K
C2969	QEM61EK-106MZ	E CAP.	10μF 25V K
G2970	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J
C2979	QFZ0083-683MZ	M CAP.	0.068μF 50V K
C2980	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J
C2982	QFV71HJ-474MZ	TF CAP.	0.47μF 50V J
C2983	QFV81HJ-474M	TF CAP.	0.47μF 50V J
C2984	QFV81HJ-474M	TF CAP.	0.47μF 50V J
⚠ C2991	QCZ9036-332M	C CAP.	3300pFAC400V M
TRANSFORMER			
T2501	CE40895-00A	H DRIVE TRANSF.	
⚠ T2601	CE41476-00A	SW TRANSF	
⚠ T2901	CE41491-00C	SW TRANSF	
⚠ T2902	CE40361-00J	DRIVE TRANSF.	
COIL			
L2441	CELC009-001	WIDTH COIL	
L2501	CE40669-00B	LINIARITY COIL	
L2502	CELP006-120Z	PEAKING COIL	12μH
L2551	CJ30030-050	HEATER CHOKE	
L2602	CJ30030-046	HEATER CHOKE	
L2603	CELC002-470	CHOKE COIL	
L2604	CELC002-470	CHOKE COIL	
L2952	CJ30030-046	HEATER CHOKE	
DIODE			
D2001	1SS133-Y	SI. DIODE	
D2002	1SS133-Y	SI. DIODE	
D2401	MA4300-Y	ZENER DIODE	
D2403	1SR35-100-Z	SI. DIODE	
D2501	1SS146-Y	SI. DIODE	
D2502	RH4F-LFK2	SI DIODE	
D2503	U19E-FK	SI. DIODE	
D2504	1SS133-Y	SI. DIODE	
D2531	MA4056 (M) -Y	ZENER DIODE	
D2532	MA4062 (H) -Y	ZENER DIODE	
D2535	1SS146-Y	SI. DIODE	
D2551	V19G-Z	SI. DIODE	
D2553	U19E-FK	SI. DIODE	
D2554	U19E-FK	SI. DIODE	
D2555	DFA1A4-4	SI. DIODE	
D2557	1SR35-100	SI. DIODE	
D2559	1SS133-Y	SI. DIODE	
D2571	1SR124-400-Z	SI. DIODE	
⚠ D2572	MA4068 (N) V1-Y	ZENER DIODE	
D2573	MA4091 (M) -Y	ZENER DIODE	

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
DIODE			
D2574	1SS133-Y	SI. DIODE	
D2575	MA4062 (M) -Y	ZENER DIODE	
D2576	RD15E (B)	ZENER DIODE	
D2602	RU1C-LFA1	SI. DIODE	
D2603	EG1Z-Z	SI DIODE	
D2604	EG1Z-Z	SI DIODE	
D2605	EU2A-Z	SI. DIODE	
D2606	RL2Z	SI DIODE	
D2607	RD9. 1E (B)	ZENER DIODE	
D2608	EU2A-Z	SI. DIODE	
D2609	RD30E (B2)	ZENER DIDOE	
D2610	EU2A-Z	SI. DIODE	
D2614	RD36E (B3)	ZENER DIODE	
D2901	D3SBA60	DIODE BRIDGE	
D2902	SF5J42	THYRISTOR	
D2904	RG1C-LFA1	SI DIODE	
D2905	RG1C-LFA1	SI DIODE	
D2908	1SS81-R	SI. DIODE	
D2909	1SS81-R	SI. DIODE	
D2951	RG4C-LFK2	SI DIODE	
D2952	EU2A	SI. DIODE	
D2955	1SS133-Y	SI. DIODE	
D2956	1SS81-R	SI. DIODE	
D2958	MA4150 (M) -Y	ZENER IDODE	
D2959	RD5. 6E (B2)	ZENER DIODE	
D2961	1SS146-Y	SI. DIODE	
D2962	1SS146-Y	SI. DIODE	
D2963	1SS146	SI. DIODE	
D2965	EU2A-Z	SI. DIODE	
D2966	1SS146-Y	SI. DIODE	
D2967	EU2A-Z	SI. DIODE	
D2968	1SS81-R	SI. DIODE	
D2970	1SS146-Y	SI. DIODE	
D2971	1SS133-Y	SI. DIODE	
TRANSISTOR			
Q2401	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q2402	2SC1890A (E, F) Y	SI. TRANSISTOR	
Q2441	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q2442	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q2443	2SD1266A (P, Q)	SI. TRANSISTOR	
Q2501	2SC3669 (O, Y) Y	SI. TRANSISTOR	
⚠ Q2502	2SD1545	SI TRANSISTOR	
Q2503	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q2504	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q2571	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q2572	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q2573	2SA1015 (Y, GR) Y	SI. TRANSISTOR	
Q2601	2SD1266A (P, Q)	SI. TRANSISTOR	
Q2603	2SA966-Y	SI. TRANSISTOR	
Q2604	2SC1815 (GR) -Y	SI. TRANSISTOR	
Q2606	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q2901	2SC4237	SI. TRANSISTOR	
Q2951	2SC3669 (O, Y) Y	SI. TRANSISTOR	
Q2952	2SC2655 (Y)	SI. TRANSISTOR	
Q2952	2SC3668 (Y)	SI. TRANSISTOR	
Q2953	2SA1428 (O, Y) -Y	SI. TRANSISTOR	
Q2954	2SC2655 (Y)	SI. TRANSISTOR	
Q2954	2SC3668 (Y)	SI. TRANSISTOR	

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SYMBOL NO.	PART NO.	PART NAME	REMARKS
IC			
IC2401	UPC1498H	I C	
IC2551	UPC7812HF	I. C.	
IC2552	UPC7805HF	I. C.	
IC2601	STR10006-A	I. C. (H)	
IC2951	AN5900	I. C. (M)	
OTHERS			
⚠ CP2601	ICP-N38-Y	IC PROTECTER	
⚠ CP2901	ICP-N38-Y	IC PROTECTER	
J2001	AX49607-004	HEADPHONE JACK	
⚠ R2571	QRH017J-4R7M	F R	4. 7 Ω 1W J
⚠ R2611	QRZ0054-8R2M	F R	8. 2 Ω 1/4W J
⚠ R2623	QRZ0054-2R2M	F R	2. 2 Ω 1/4W J
⚠ R2632	QRZ0054-2R2M	F R	2. 2 Ω 1/4W J
⚠ R2633	QRZ0054-2R2M	F R	2. 2 Ω 1/4W J
⚠ R2959	QRZ0055-2R2M	F R	2. 2 Ω 1/2W J
S2001	QST3321-C01	PUSH SWITCH	Skew, RGB, S-VHS
S2003	QSS4C22-C04	SLIDE SWITCH	Speaker
S2006	QSP1A11-C10	PUSH SWITCH	Standard
S2007	QSP1A11-C10	PUSH SWITCH	Level△
S2008	QSP1A11-C10	PUSH SWITCH	Level▽
S2009	QSP1A11-C10	PUSH SWITCH	Function
S2010	QSP1A11-C10	PUSH SWITCH	Memory
S2401	QSL4A13-C02	LEVER SWITCH	V. Center
TH2441	ERT-D2ZHL503S	THERMISTOR	

CRT SOCKET PC BOARD ASS'Y (SBY-3054A(U))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE RESISTOR			
R3113	QVPA803-502M	V R (R CUT OFF)	5kΩ B
R3114	QVPA803-502M	V R (G CUT OFF)	5kΩ B
R3115	QVPA803-502M	V R (B CUT OFF)	5kΩ B
R3119	QVPA803-201M	V R (R DRIVE)	200 Ω B
R3120	QVPA803-201M	V R (G DRIVE)	200 Ω B
RESISTOR			
R3104	QRG029J-153A	OM R	15kΩ 2W J
R3105	QRG029J-153A	OM R	15kΩ 2W J
R3106	QRG029J-153A	OM R	15kΩ 2W J
R3107	QRG029J-183A	OM R	18kΩ 2W J
R3108	QRG029J-183A	OM R	18kΩ 2W J
R3109	QRG029J-183A	OM R	18kΩ 2W J
R3125	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
R3126	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
R3127	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
R3128	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
R3129	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
R3130	QRZ0056-332Z	COMP. R	3.3kΩ 1/2W K
CAPACITOR			
C3161	QFH53BK-223M	MM CAP.	0.022μF 1250V K
COIL			
L3101	QQL043K-101	PEAKING COIL	100μH
L3102	QQL043K-101	PEAKING COIL	100μH
L3103	QQL043K-101	PEAKING COIL	100μH
L3104	A76186-47Z	PEAKING COIL	47μF
L3105	A76186-47Z	PEAKING COIL	47μF
L3106	A76186-47Z	PEAKING COIL	47μF
DIODE			
D3101	1SS133-Y	SI. DIODE	
D3102	1SS133-Y	SI. DIODE	
D3103	1SS133-Y	SI. DIODE	
D3104	1SS133-Y	SI. DIODE	
D3105	1SS133-Y	SI. DIODE	
TRANSISTOR			
Q3101	2SC1360	SI. TRANSISTOR	
Q3102	2SC1360	SI. TRANSISTOR	
Q3103	2SC1360	SI. TRANSISTOR	
Q3104	2SC2068-LB	SI. TRANSISTOR	R. Out
Q3105	2SC2068-LB	SI. TRANSISTOR	G. Out
Q3106	2SC2068-LB	SI. TRANSISTOR	B. Out
Q3151	2SC1360	SI. TRANSISTOR	
Q3152	2SC1360	SI. TRANSISTOR	
Q3153	2SC1360	SI. TRANSISTOR	
OTHERS			
⚠	A75522-C	CRT SOCKET	

DIGITAL SOUND PC BOARD ASS'Y (SBY-6001A(U))

1/2

SYMBOL NO.	PART NO.	PART NAME	REMARKS
RESISTOR			
R6421	QRV141F-9101Y	MF R	9.1kΩ 1/4W F
R6422	QRV141F-1201AY	MF R	1.2kΩ 1/4W F
R6431	QRV141F-9101Y	MF R	9.1kΩ 1/4W F
R6432	QRV141F-1201AY	MF R	1.2kΩ 1/4W F
R6911	QRG039J-390	OM R	39 Ω 3W J
R6921	QRX039J-4R7A	MF R	4.7 Ω 3W J
CAPACITOR			
C6110	QCT25CH-6R0AZ	C CAP.	6pF 50V J
C6205	QCT25CH-560Z	C CAP.	56pF 50V J
C6206	QCT25CH-220Z	C CAP.	22pF 50V J
C6207	QCT25CH-120Z	C CAP.	12pF 50V J
C6208	QAT3110-300A	TRIM CAP.	30pF
C6213	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C6214	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C6215	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C6216	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
C6221	QCT25CH-180Z	C CAP.	18pF 50V J
C6222	QAT3110-300A	TRIM CAP.	30pF
C6223	QCT25CH-560Z	C CAP.	56pF 50V J
C6224	QCT25CH-180Z	C CAP.	18pF 50V J
C6413	QFP31HJ-681SZ	PP CAP.	680pF 50V J
C6418	QFP31HJ-681SZ	PP CAP.	680pF 50V J
C6491	QEN61HM-105Z	BP E CAP.	1μF 50V M
C6492	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6493	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6494	QEN61HM-105Z	BP E CAP.	1μF 50V M
C6501	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6502	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6503	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6504	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6505	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6506	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6511	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6512	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6513	QEN61CM-106Z	BP E CAP.	10μF 16V M
C6514	QEN61CM-106Z	BP E CAP.	10μF 16V M
TRANSFORMER			
T6103	CE40119-303	CW TRANSF	
T6161	CE40737-201	SIF TRANSF	
T6201	CE41541-001	B P F	
COIL			
L6101	CE40143-R56	PEAKING COIL	0.56μH
L6102	A76186-1.5Z	PEAKING COIL	1.5μH
L6104	A76186-6.8Z	PEAKING COIL	6.8μH
L6105	A76186-6.8Z	PEAKING COIL	6.8μH
L6106	A76186-6.8Z	PEAKING COIL	6.8μH
L6107	A76186-6.8Z	PEAKING COIL	6.8μH
L6108	A76186-6.8Z	PEAKING COIL	6.8μH
L6109	A76186-8.2Z	PEAKING COIL	8.2μH
L6201	A76186-820Z	PEAKING COIL	820μH
L6202	A76186-820Z	PEAKING COIL	820μH
L6401	A76186-33Z	PEAKING COIL	33μH
L6402	A76186-33Z	PEAKING COIL	33μH
L6901	A76186-6.8Z	PEAKING COIL	6.8μH
DIODE			
D6702	1SS133-Y	SI. DIODE	
D6703	1SS133-Y	SI. DIODE	

A/V TERMINAL PC BOARD ASS'Y (SBY-7003A(U))

1/2

SYMBOL NO.	PART NO.	PART NAME	REMARKS
CAPACITOR			
C7001	QEKC1HM-105GMZ	E CAP.	1μF 50V M
C7002	QEKC1HM-105GMZ	E CAP.	1μF 50V M
C7003	QEKC1HM-105GMZ	E CAP.	1μF 50V M
C7004	QEKC1HM-105GMZ	E CAP.	1μF 50V M
C7005	QEN61HM-105Z	BP E CAP.	1μF 50V M
C7006	QEN61HM-105Z	BP E CAP.	1μF 50V M
C7008	QEKC1HM-105GMZ	E CAP.	1μF 50V M
C7009	QEN61HM-105Z	BP E CAP.	1μF 50V M
C7011	QEKC1CM-336MZ	E CAP.	33μF 16V M
C7013	QEKC1CM-107MZ	E CAP.	100μF 16V M
C7101	QEKC1CM-476MZ	E CAP.	47μF 16V M
C7102	QEKC1CM-336MZ	E CAP.	33μF 16V M
C7104	QEKC1CM-336MZ	E CAP.	33μF 16V M
C7107	QEKC1CM-336MZ	E CAP.	33μF 16V M
C7110	QEKC1CM-476MZ	E CAP.	47μF 16V M
C7111	QEKC1CM-476MZ	E CAP.	47μF 16V M
C7114	QEKC1CM-107MZ	E CAP.	100μF 16V M
C7201	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7202	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7203	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7204	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7205	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7206	QEKC1VM-475GMZ	E CAP.	4.7μF 35V M
C7209	QEKC1CM-106GMZ	E CAP.	10μF 16V M
COIL			
L7801	CJ30030-005	HEATER CHOKE	
L7802	CJ30030-005	HEATER CHOKE	
DIODE			
D7001	RD13JS-Y	SI DIODE	
D7002	RD13JS-Y	SI DIODE	
D7003	RD13JS-Y	SI DIODE	
D7004	RD13JS-Y	SI DIODE	
D7005	RD13JS-Y	SI DIODE	
D7006	RD13JS-Y	SI DIODE	
D7007	RD13JS-Y	SI DIODE	
D7008	RD13JS-Y	SI DIODE	
D7009	RD13JS-Y	SI DIODE	
D7010	RD13JS-Y	SI DIODE	
D7011	RD13JS-Y	SI DIODE	
D7012	RD13JS-Y	SI DIODE	
D7015	RD13JS-Y	SI DIODE	
D7016	RD13JS-Y	SI DIODE	
D7109	RD13JS-Y	SI DIODE	
D7110	RD13JS-Y	SI DIODE	
D7111	RD13JS-Y	SI DIODE	
D7112	RD13JS-Y	SI DIODE	
D7201	RD13JS-Y	SI DIODE	
TRANSISTOR			
Q7001	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7002	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7003	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7005	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7006	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7007	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7008	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7009	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7010	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7101	2SC1815 (Y, GR) Y	SI. TRANSISTOR	

2/2

SYMBOL NO.	PART NO.	PART NAME	REMARKS
DIODE			
D6704	1SS133-Y	SI. DIODE	
D6705	1SS133-Y	SI. DIODE	
D6706	1SS133-Y	SI. DIODE	
D6901	RD11E (B2) -Y	ZENER DIODE	
D6902	1SS133-Y	SI. DIODE	
TRANSISTOR			
Q6101	2SC1360	SI. TRANSISTOR	
Q6104	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6105	2SA933S (Q, R) -Y	SI. TRANSISTOR	
Q6201	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6251	2SC1815 (Y) -Y	SI. TRANSISTOR	
Q6311	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6312	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6313	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6501	2SC2878 (B) -Y	SI. TRANSISTER	
Q6502	2SC2878 (B) -Y	SI. TRANSISTER	
Q6520	2SC1740 (Q, R) -Y	SI. TRANSISTOR	
Q6530	2SC1740 (Q, R) -Y	SI. TRANSISTOR	
Q6591	2SA933S (Q, R) -Y	SI. TRANSISTOR	
Q6701	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6702	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6703	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6704	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6705	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6706	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6707	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6708	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6709	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6710	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6711	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6712	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6713	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6714	2SC1740S (Q, R) Y	SI TRANSISTOR	
Q6901	2SC1740 (Q, R) -Y	SI. TRANSISTOR	
IC			
IC6101	M51365-SP	I. C. (M)	
IC6201	TA8662N	I. C.	
IC6301	VC2050	I. C.	
IC6302	M5M21C67P-55	I. C. (M)	
IC6401	TD6710AN	I. C.	
IC6421	M5218L	I. C.	
IC6450	CE41664-001	H I C	
IC6451	CE41664-001	H I C	
IC6500	M51551P	I. C. (M)	
IC6501	TK15021Z	I. C.	
IC6502	M5218L	I. C.	
IC6911	TA78L005AP	I. C.	
IC6921	TA78012AP	I. C. (M)	
OTHERS			
CF6401	CSA16.93MX040	C RESONATOR	
CF6601	A75088-C	CERAMIC FILTER	
CF6602	A75088-C	CERAMIC FILTER	
⚠ R6500	QRZ0054-470M	F R	47 Ω 1/4W J
SF6101	CE41031-403	SAW FILTER	
X6201	CE41539-001	X-TAL	
X6202	CE41540-001	X-TAL	

SYMBOL NO.	PART NO.	PART NAME	REMARKS
TRANSISTOR			
Q7102	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7103	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7104	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7105	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7106	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7107	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7109	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7110	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7111	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7112	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7113	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7115	2SC1815 (Y, GR)	SI. TRANSISTOR	
Q7201	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7202	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
Q7203	2SC1815 (Y, GR) Y	SI. TRANSISTOR	
IC			
IC7001	TC4066BP	I. C. (M)	
IC7002	TC4066BP	I. C. (M)	
IC7003	TC4066BP	I. C. (M)	
IC7101	TC4066BP	I. C. (M)	
IC7102	TC4066BP	I. C. (M)	
IC7103	TC4066BP	I. C. (M)	
IC7104	TC4066BP	I. C. (M)	
IC7201	TC4066BP	I. C. (M)	
IC7202	TC4066BP	I. C. (M)	
OTHERS			
DL7101	CE41042-002	DELAY LINE	
J7001	CE40529-006	SCART CONNECTOR	Peri 1
J7002	CE40529-006	SCART CONNECTOR	Peri 2
J7003	QMD4A04-001	DIN CONNECTOR	S In
J7004	CEMN021-001	PIN JACK	Audio In
J7005	CEMN021-001	PIN JACK	TV Audio Out
J7006	CEMT005-001	SP TERMINAL	SP Out

MICOM SUPPORT PC BOARD ASS'Y (SBY-8001A(U))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
CAPACITOR			
C8002	QFV81HJ-104M	TF CAP.	0.1μF 50V J
C8003	QFV81HJ-104M	TF CAP.	0.1μF 50V J
DIODE			
D8001	1SS133	SI. DIODE	
TRANSISTOR			
Q8001	2SC1815 (Y, GR)	SI. TRANSISTOR	
IC			
IC8001	MN4050B	I. C. (M)	
IC8002	MN4013B	I. C. (M)	

LINE FILTER PC BOARD ASS'Y (SBY-9007A(U))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
CAPACITOR			
⚠ C9091	QFZ9022-473M	MF CAP.	0.047μFAC250V M
⚠ C9093	QFZ9022-473M	MF CAP.	0.047μFAC250V M
C9094	QCZ9036-471M	C CAP.	470pFAC400V K
C9095	QCZ9036-471M	C CAP.	470pFAC400V K
⚠ C9901	QFZ9022-473M	MF CAP.	0.047μFAC250V M
OTHERS			
⚠ F9091	QMF51E2-4R0S	FUSE	4.0A
⚠ LF9091	CE40719-00A	LINE FILTER	
⚠ LF9093	CE40719-00A	LINE FILTER	
⚠ TH9091	A76038-T	POSISTOR	or A76038

■ MODULE PRINTED CIRCUIT BOARD PARTS LIST

- **The following module PC boards are supplied as assemblies. The component parts on the module PC boards are available only when the parts are listed in the "Module Printed Circuit Board Parts List".**

Ⓐ D.L. APACON MODULE (SBY-D001A(U))

Ⓑ IF MODULE (SBY-F002A-MU4)

Ⓒ STATION SELECT MODULE (SBY-M005A(U))

Ⓓ PERI MODULE (SBY-P006A(U))

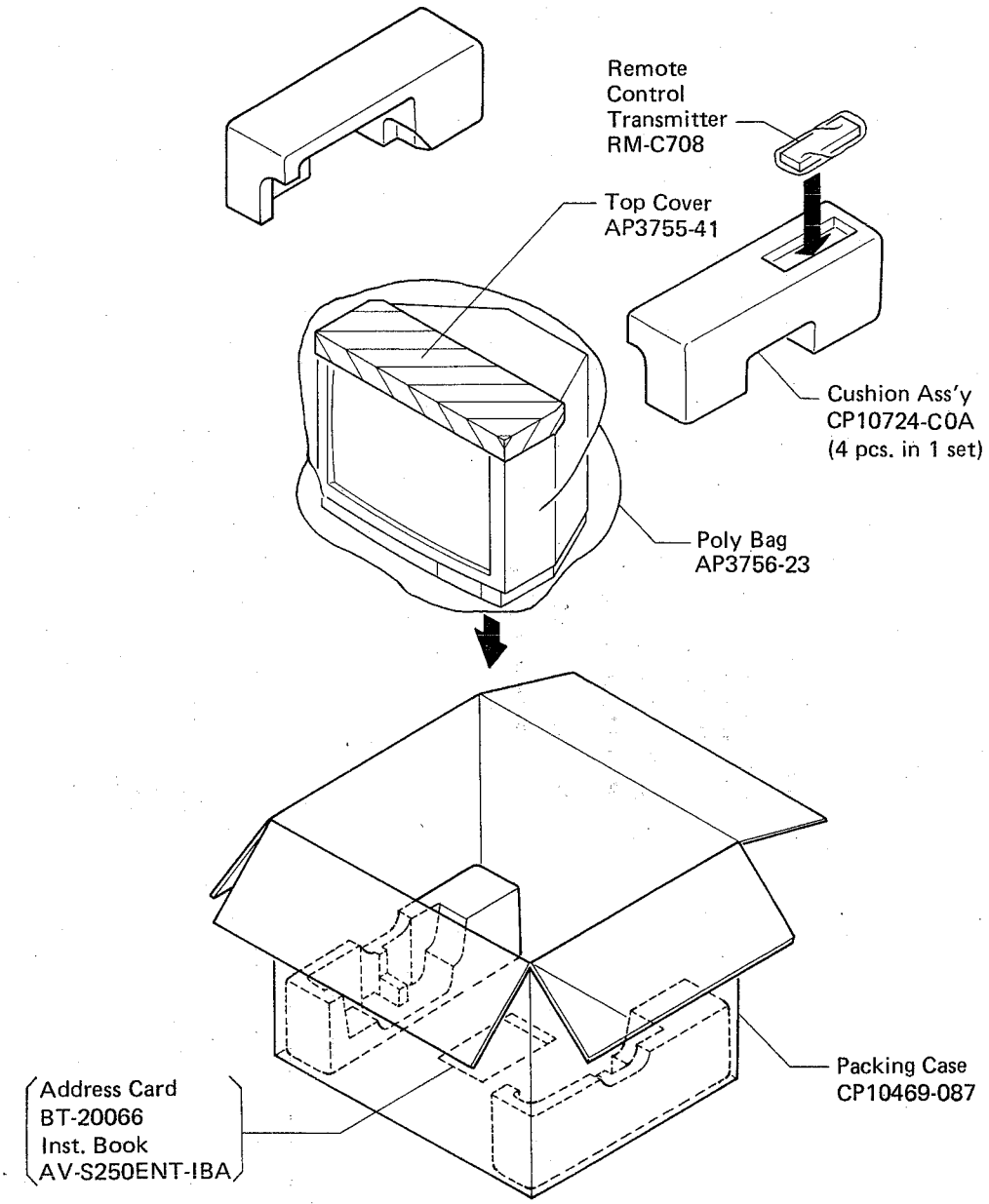
SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE RESISTOR			
R1002	QVPA601-103A	V R (B CUT OFF)	10kΩ B
R1004	QVPA601-103A	V R (R CUT OFF)	10kΩ B
R1006	QVPA601-472A	V R (SUB BRIGHT)	4.7kΩ B
R1012	QVPA601-223A	V R (SUB CONTRAST)	22kΩ B

Ⓔ RGB SWITCH MODULE (SBY-R002A(U))

Ⓕ TELETEXT MODULE (SBY-T002A(U))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
CAPACITOR			
C1016	QAT3110-300A	TRIM CAP.	30pF

■ PACKING DIAGRAM



CAUTION

- The parts marked ⚠ are very important for the safety. When replacing these parts, be sure to use specified ones to secure the safety and performance.
- The parts which do not have the drawing in this Parts List, P.C. Board Ass'y and the Part No. columns of which are filled with lines —— , will not be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in (NOTE 2) "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to (NOTE 2).

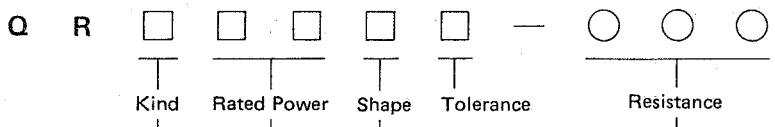
(NOTE 1) ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Aluminum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
± 1 %	± 2 %	± 5 %	± 10 %	± 20 %	± 30 %	$^{+30}_{-10}$ %	$^{+50}_{-10}$ %	$^{+80}_{-20}$ %	$^{+100}_{-0}$ %

(NOTE 2) HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



Symbol	Part Name
C	COMP. R
D	C R
S	CH MG R

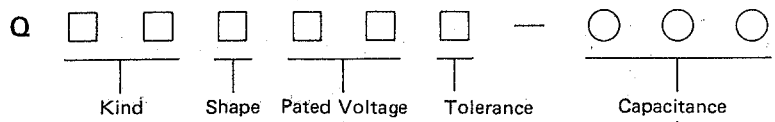
Symbol	Rated Power
0 1	1 W
1 2	1/2 W
1 4	1/4 W
1 6	1/6 W
1 8	1/8 W

Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by Ω and following 0.
Please note that, in case of resistance less than 10 Ω, a letter "R" will be effective as point.

Ex. · 2.2 Ω → 2R2
· 470 Ω = 47×10^1 → 471
· 150 kΩ = 15×10^4 → 154

■ CAPACITOR



Symbol	Part Name
C S	C CAP.
C S	CH C CAP.
E T	E CAP.
F M	M CAP.

5 Figure / 6 Figure	0	1	2
A		10 V	100 V
C		16 V	160 V
D			200 V
E		25 V	250 V
H		50 V	500 V
J	6.3 V	63 V	
V		35 V	

Indicate with first two-figure expressed by pF and following 0.
Please note that, in case of capacitance less than 10 pF, a letter "R" will be effective as point.

Ex. · 5 pF = → 5R0
· 1000 pF = 10×10^2 → 102
· 47 μF = 47×10^6 → 476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (Compact part)

JVC AV-S250ENT SCHEMATIC DIAGRAM

■ NOTICE

○ Voltage values and waveforms are measured by respectively receiving and displaying on the screen the colour bars signals of the PAL .
[Voltage value display method]
The voltage values indicated within the circuits denote those obtained when PAL colour bar signals are received and displayed on the screen.

○ The voltage values when receiving and displaying the PAL signal on the screen and the each mode values of the VSM & AUDIO STATUS are varied is shown in the LIST on page ② (⇨Difference voltage list).
Multimeter used.
DC 20kΩ/V
Given figures are all DC voltages.
Sweep speed of oscilloscope
H→20μS/div. V→5mS/div.
Others—sweep speed specified

○ Since the schematic diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

■ SAFETY

FR (⁻⁄\⁄\⁄FR⁻) denotes a fusible resistor which operates as a fuse. When replacing fusible resistors and parts indicated with black shading (▬) in the circuit diagrams, be sure to ensure safety by using designated parts.
As to other parts too, use designated parts to maintain safety and performance.

NOTE FOR SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (primary: ⊥) side GND and the NEUTRAL (secondary: ⏚) side GND.
Don't short between the LIVE side GND and NEUTRAL side GND or never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND at the same time.
If above note will not be kept, a fuse or any parts will be broken.

■ INDICATION OF PARTS SYMBOL

Inside board (Example) SBY-1304A: R1209 → R209
Outside board (Example) R0001 → R01

■ SCHEMATIC DIAGRAM INDICATION

Resistor

○ Resistance value
Without unit : [Ω] K : [kΩ] M : [MΩ]
○ Rated allowable power
Without indication : 1/6W
＊ Others Indicated
○ Type
Without indication : Carbon resistor
OMR : Oxide metal film resistor
UNFR : Unflammable resistor
MFR : Metal film resistor
MPR : Metal plate resistor
FR : Fusible resistor
＊ Composition resistor 1/2 [W] is indicated as 1/2S or Comp.

Capacitor

○ Capacitance
Above 1 [pF] Below 1 [μF]
○ Withstnad voltage
Without indication : DC 50 [V]
Others : DC withstand voltage [V]
AC indicated : AC withstand voltage [V]
○ Indications for electrolitic capacitors are as follows.
(Example)
47/50→capacitance [μF] /withstand voltage [V]
○ Type
Without indication : Ceramic capacitor
MY : Mylar capacitor
MM : Metalized mylar capacitor
PP : Polypropylene capacitor
MPP : Metalized polypropylene capacitor
MF : Metalized film capacitor
BP : Bipolar electrolytic capacitor
TAN. : Tantalum capacitor

Coil

Without unit : [μH]

Connection method

▭ : Connector
: Receptacle
○ ○ : Wrapping or soldering

Power Supply

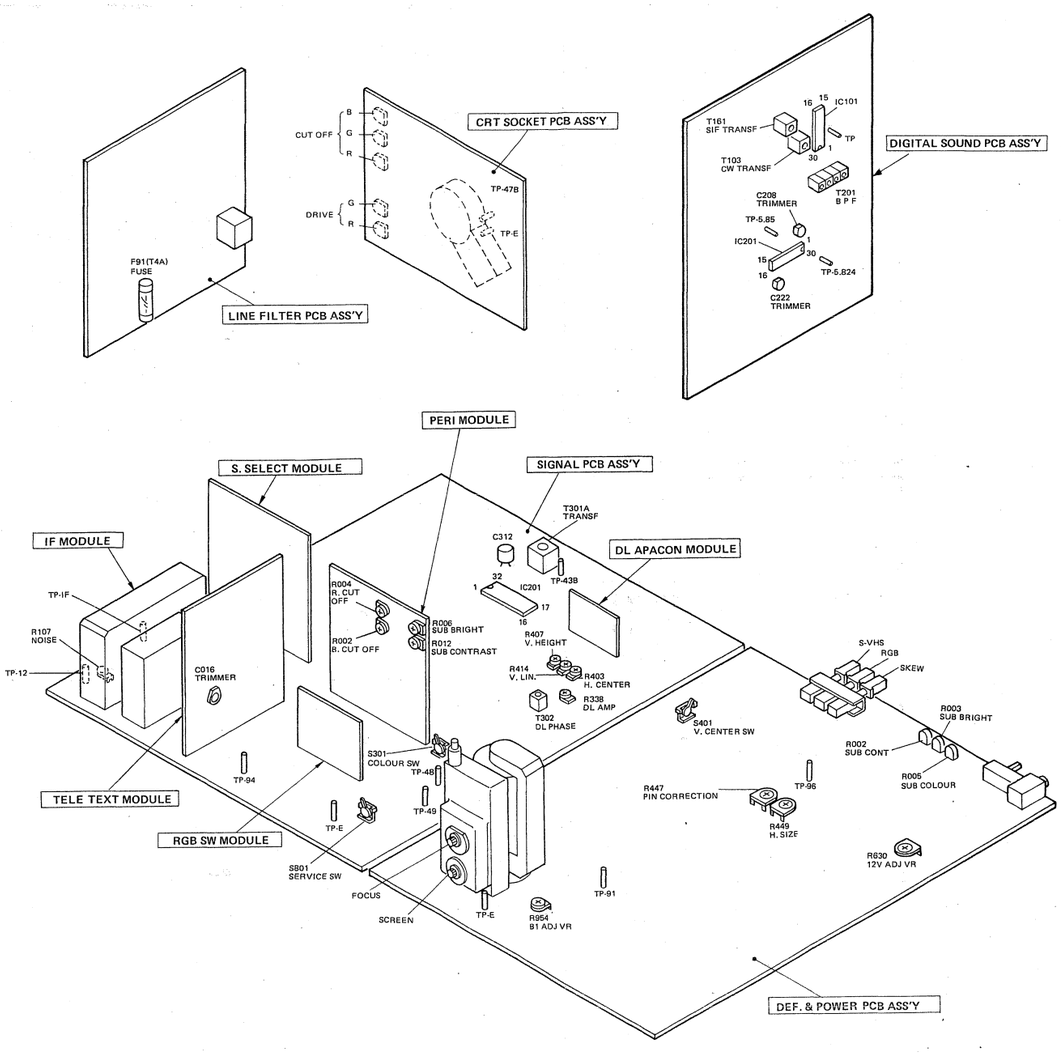
▬▬ : B_1(148V) ▬▬ : B_2(12V)
▬▭▬ : 9V ▭▭▭ : 5V
＊ Each voltage reading specified

Test point & GND. symbol.

◉ : Test point by miniature GT pin
○ : Only test point display
⊥ : Live (Primary) side ground
⏚ : Neutral (Secondary) side ground

JVC VICTOR COMPANY OF JAPAN, Ltd.
Printed in Japan
881107 NPT/VP (1/6)

ALIGNMENT LOCATION



■ DIFFERENCE VOLTAGE LIST

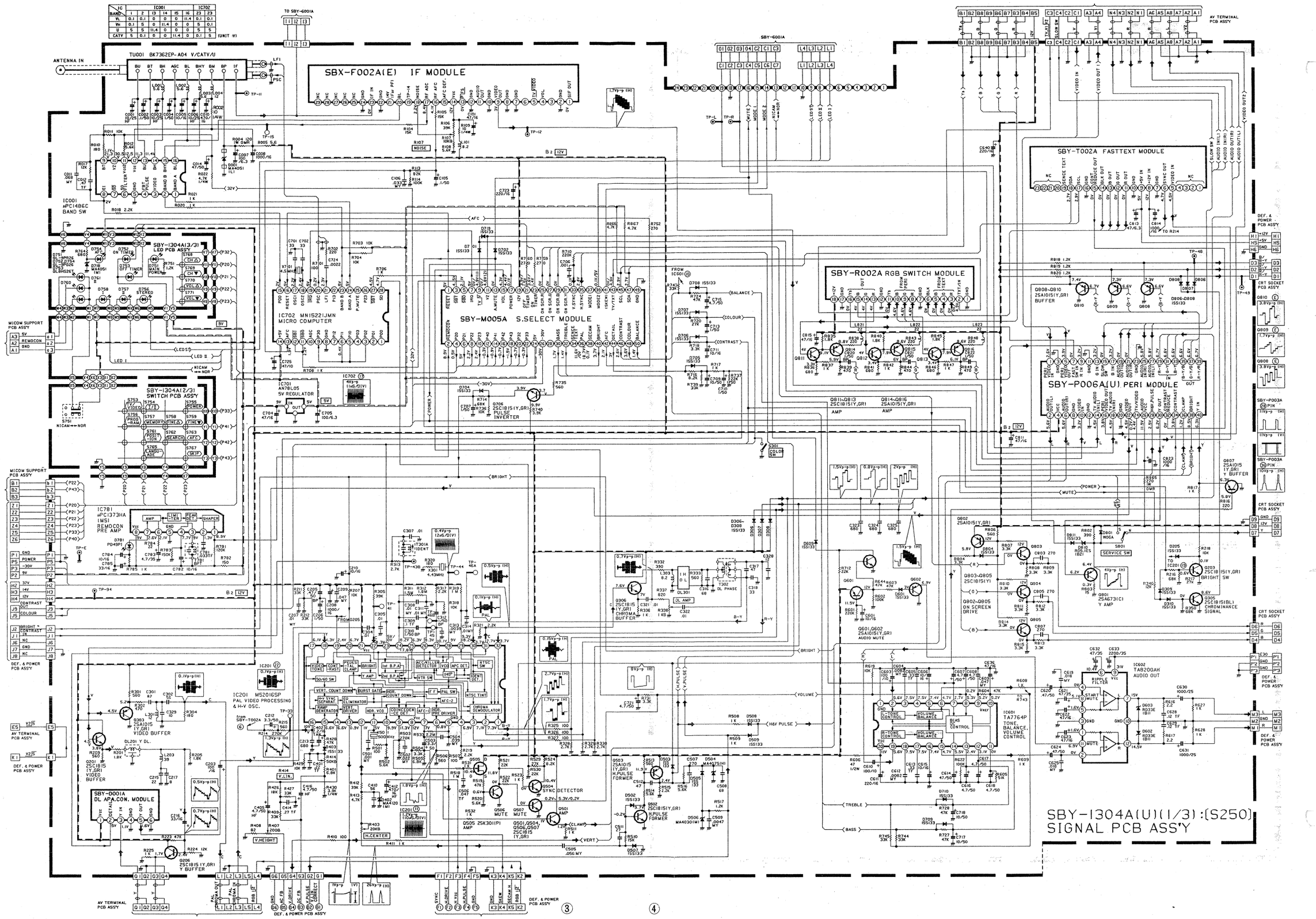
(UNIT=V)

SYMBOL	SBY-M005A(U)							SBY-D001A(U)	SBY-P006A(U)		IC201	IC601			Q706		
PIN No.	30	32	40	44	46	48	50	2	34	38	25	7	12	13	B	C	E
MODE	⑤	⑥	②	④	③	①	⑦	④	③	②	③	⑦	⑤	⑥	②	②	②
VOLTAGE	0.1 ~ 4.6	0.1 ~ 4.2	0 ~ 7.9	0.3 ~ 6.7	0.6 ~ 6.5	0.3 ~ 6	0.1 ~ 4.6	2.4 ~ 8	2.1 ~ 6.3	5.2 ~ 7.4	5.7 ~ 6.9	0.1 ~ 4.7	1.2 ~ 4.8	0.1 ~ 4.2	0 ~ 7.9	0.6 ~ 7.5	11.9 ~ 8.3

*NOTICE
• MODE : ①=COLOUR, ②=BRIGHT, ③=CONTRAST, ④=DETAIL, ⑤=BASS, ⑥=TREBLE, ⑦=BALANCE
• VOLTAGE =MIN [−30]~MAX [+30] (ONLY 'BALANCE'=LEFT [L]~RIGHT [R])

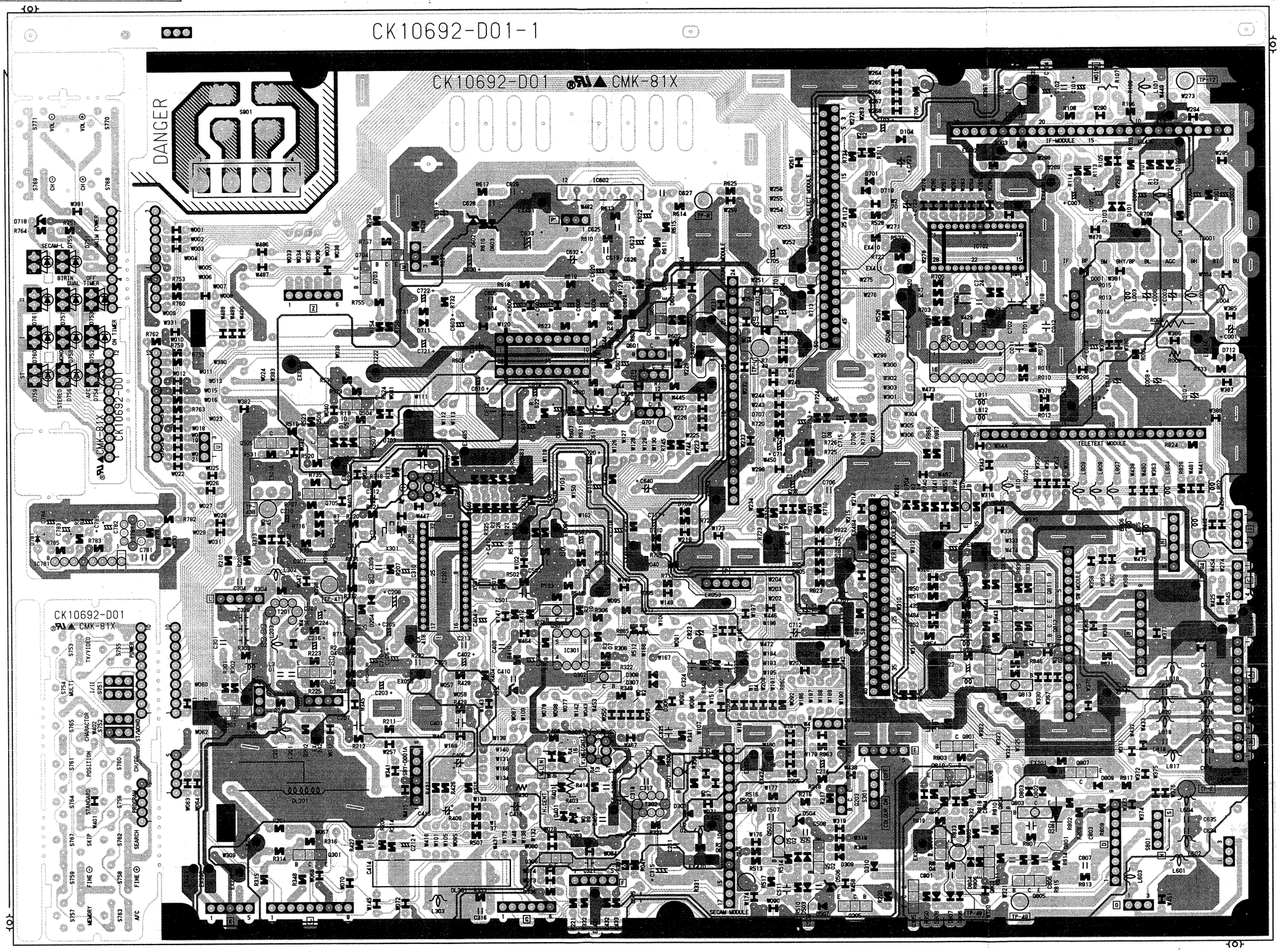
SIGNAL PCB SCHEMATIC DIAGRAM

Ⓐ AV-S250ENT AV-S250ENT Ⓐ



SIGNAL PCB BACK PATTERN

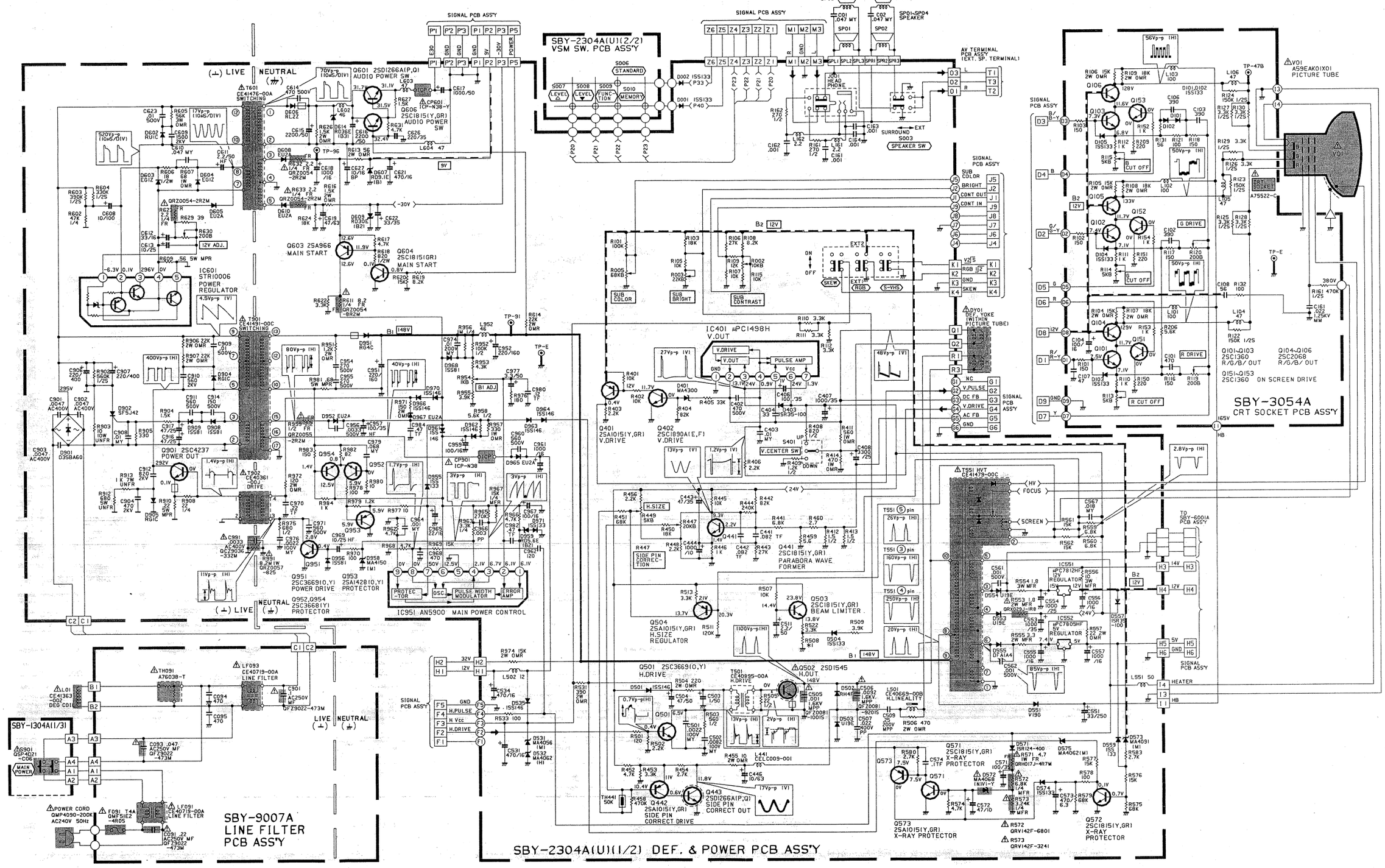
FRONT



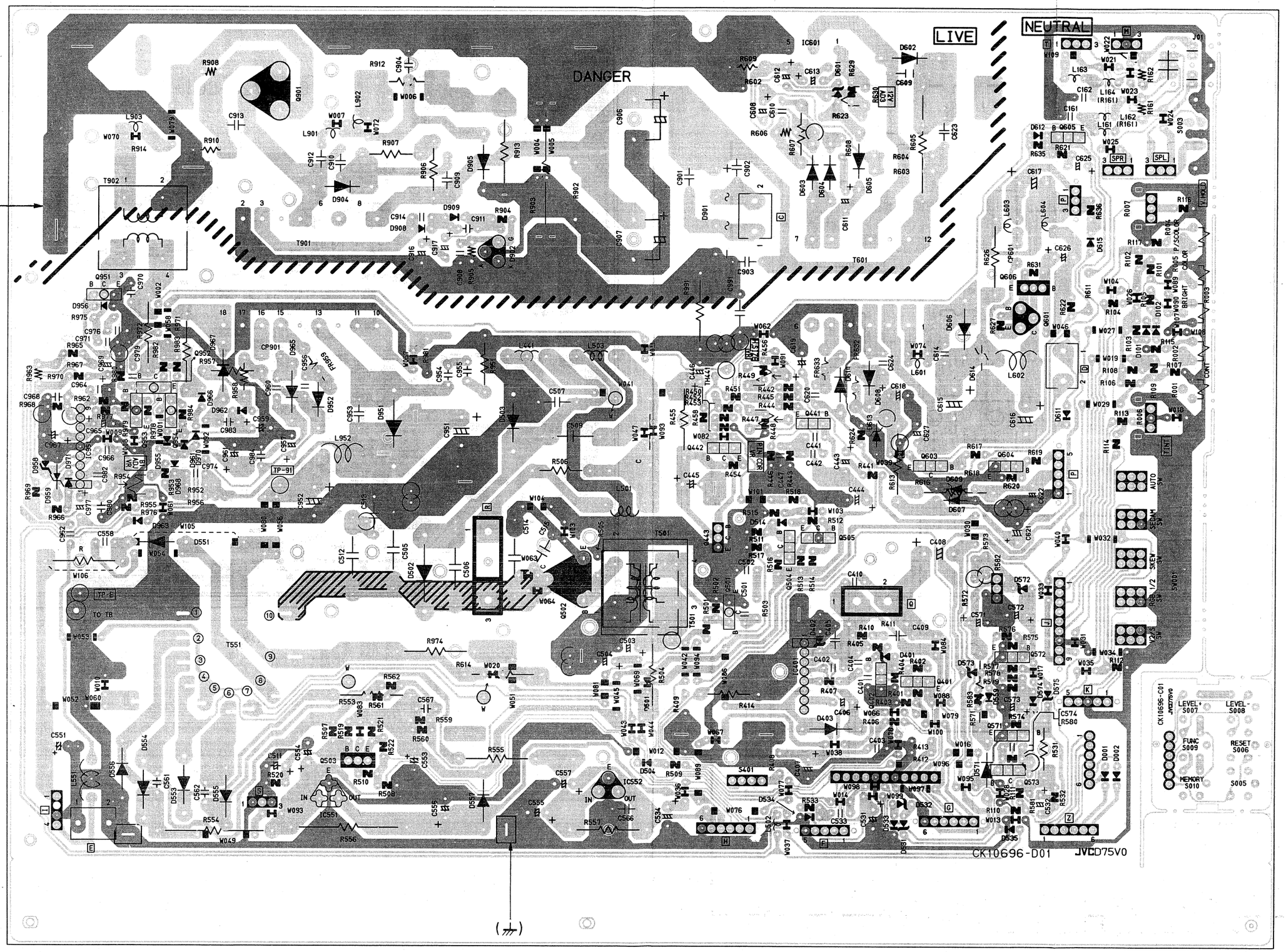
: solder side (signal etc.)　: solder side (ground)　: part side

⑤　⑥

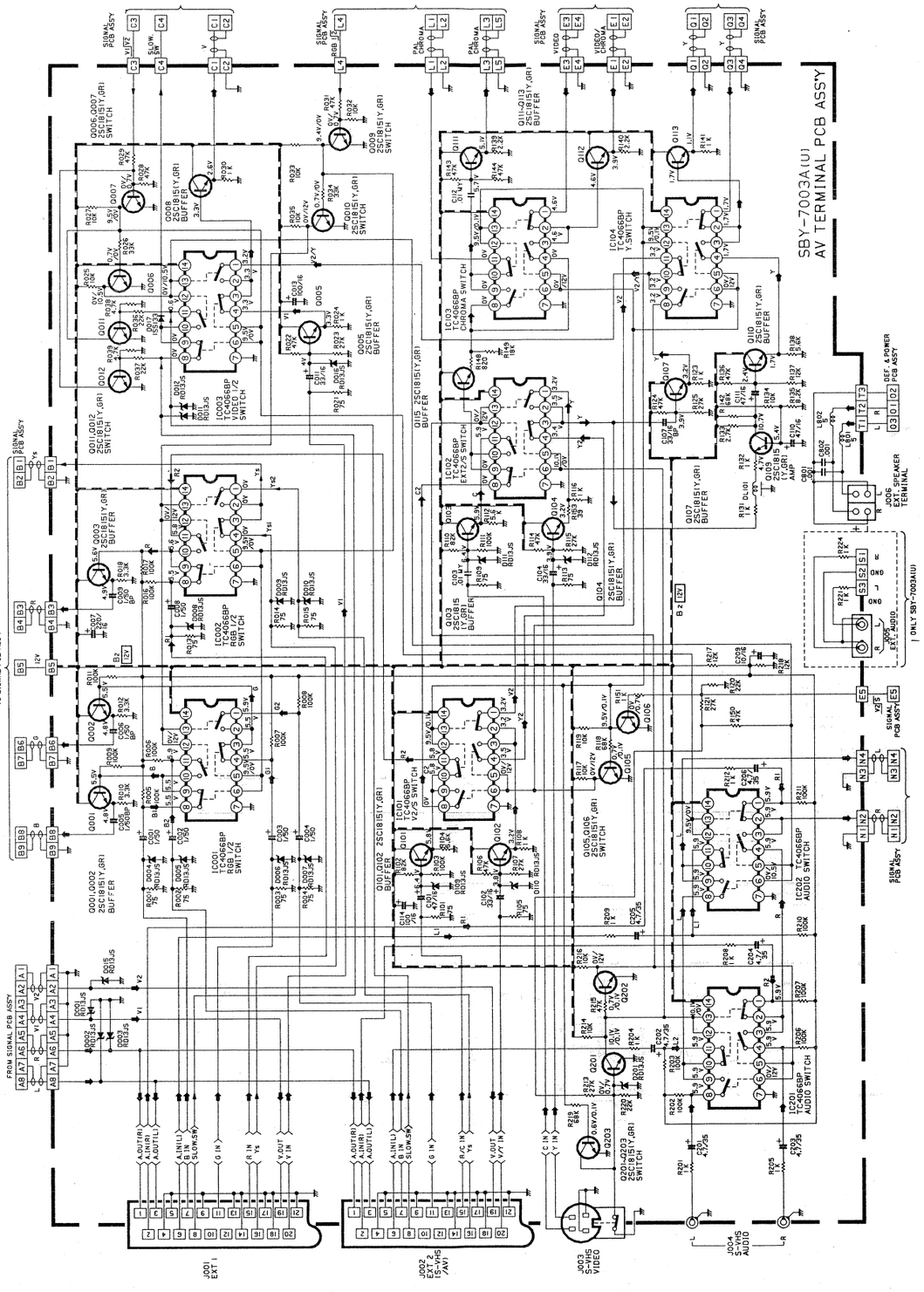
DEF & POWER PCB SCHEMATIC DIAGRAM



DEF & POWER PCB BACK PATTERN

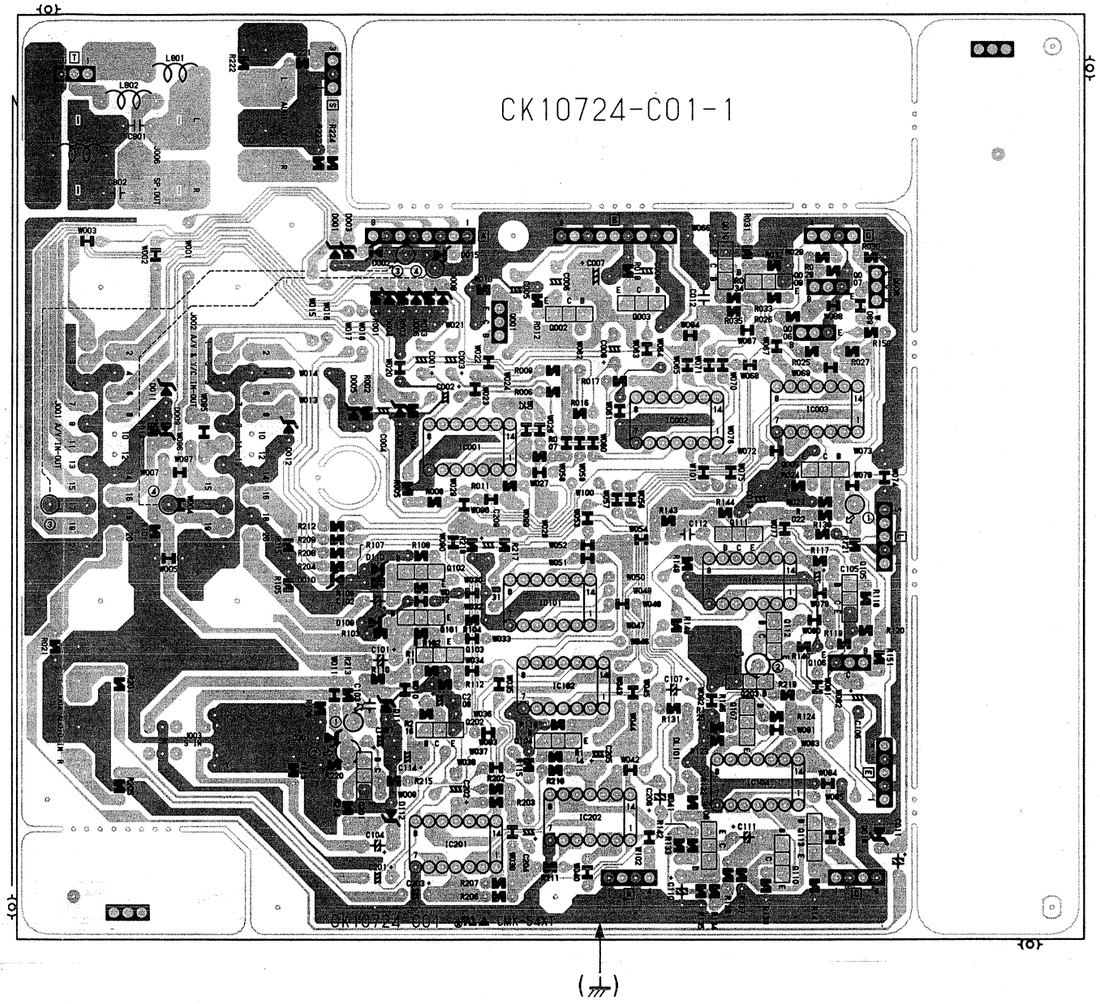


A/V TERMINAL PCB SCHEMATIC DIAGRAM

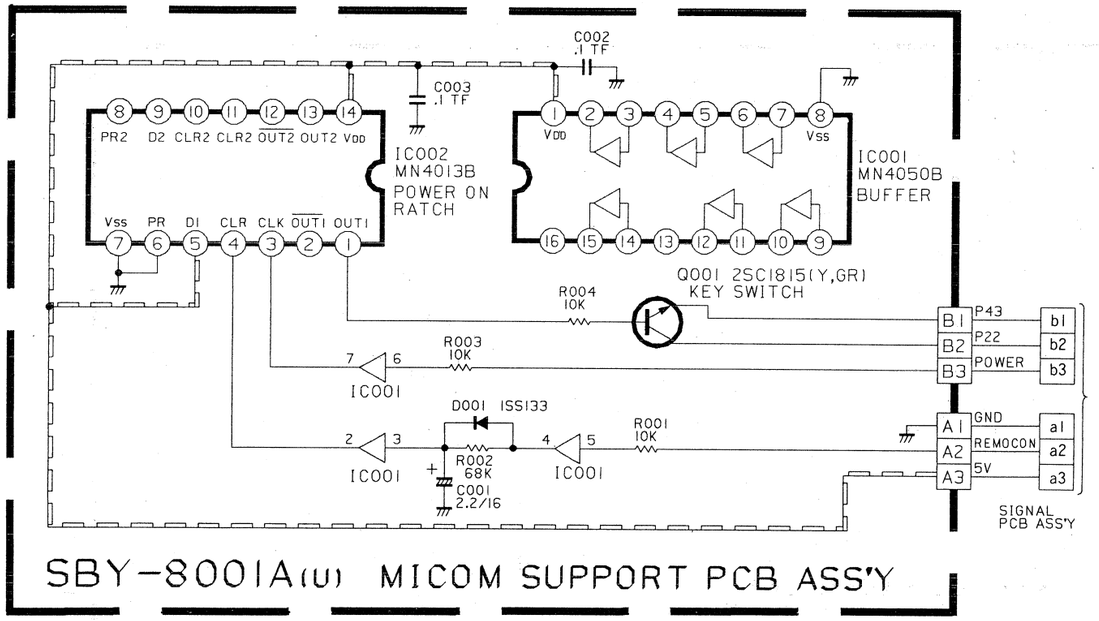


A/V TERMINAL PCB BACK PATTERN

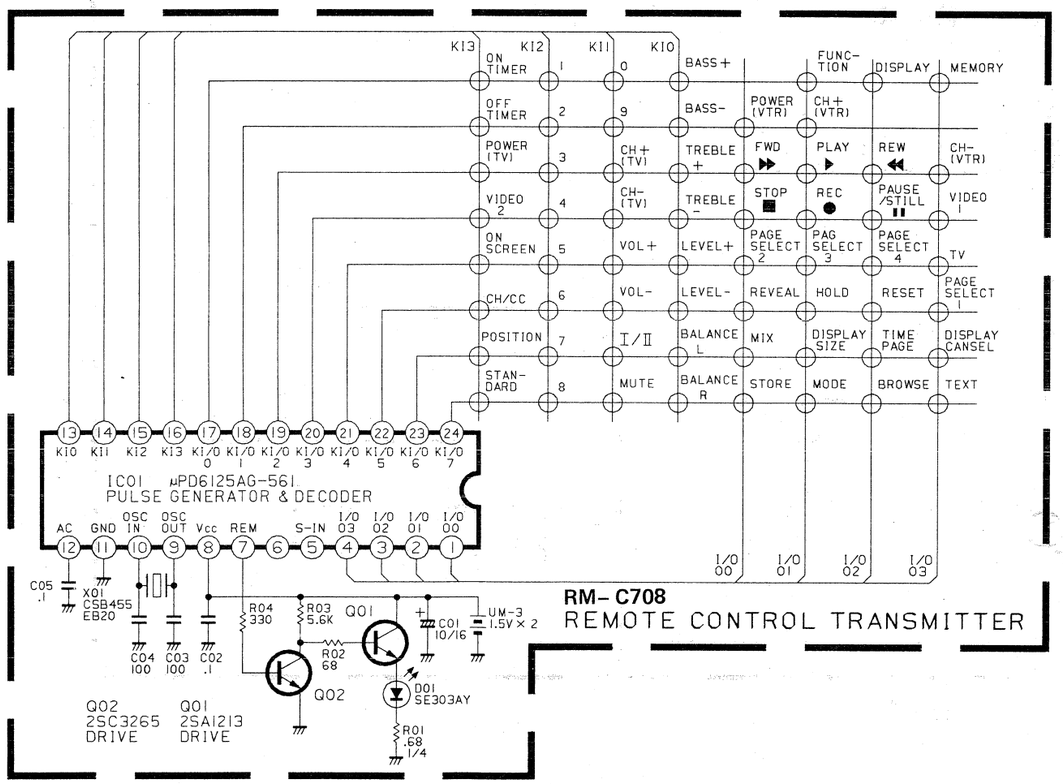
TOP



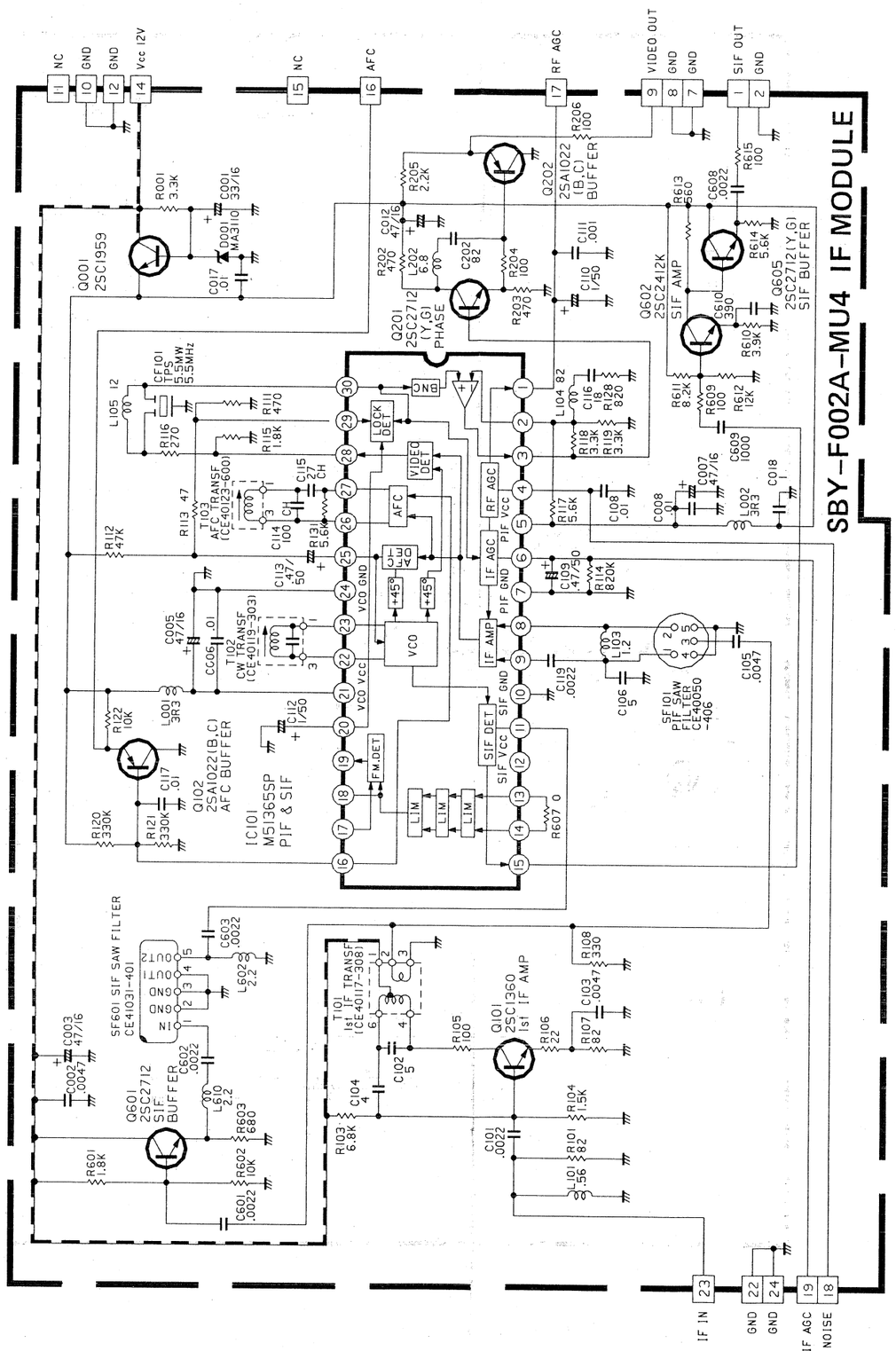
MICOM SUPPORT PCB SCHEMATIC DIAGRAM



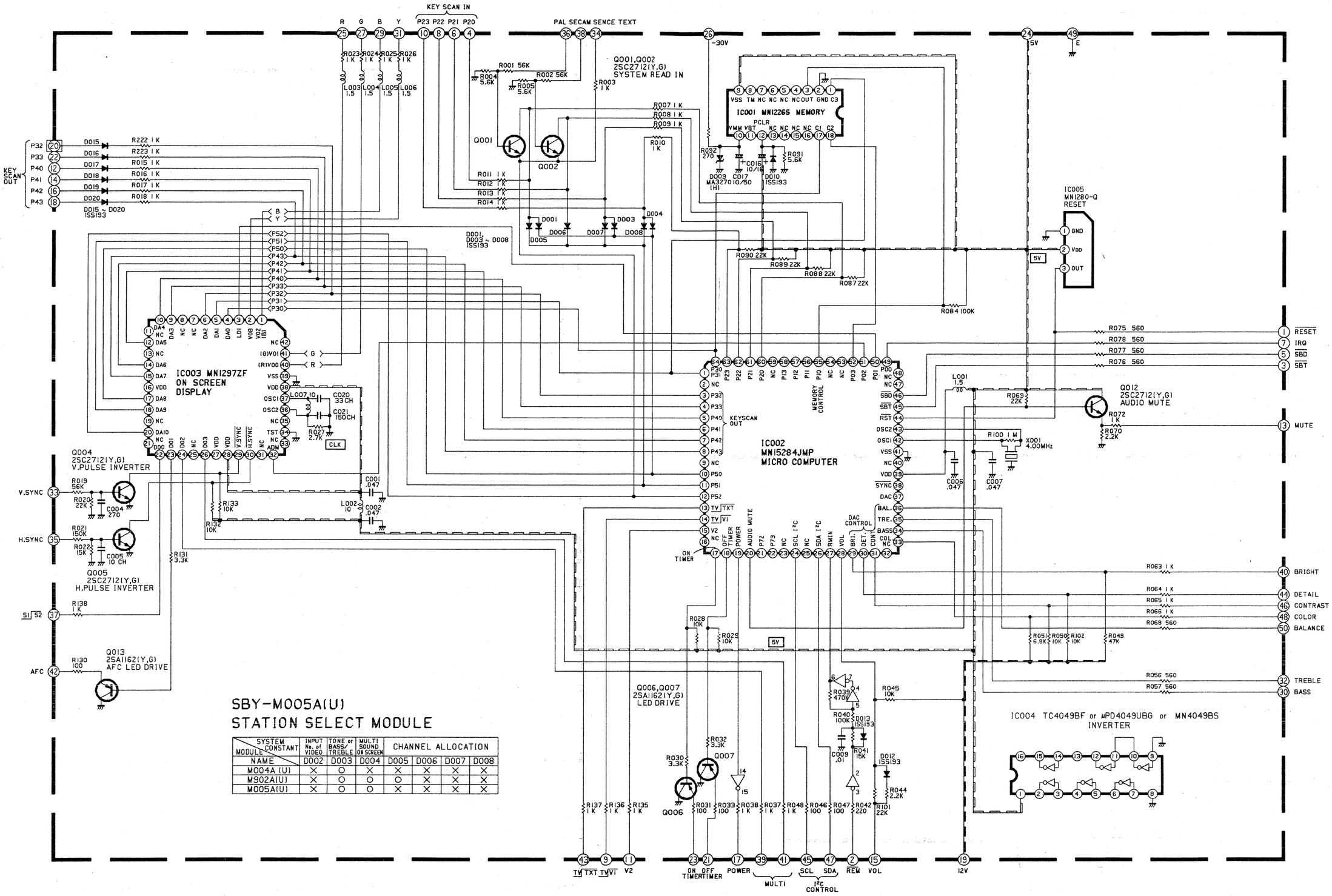
REMOTE CONTROL TRANSMITTER SCHEMATIC DIAGRAM



IF MODULE SCHEMATIC DIAGRAM



STATION SELECT MODULE SCHEMATIC DIAGRAM



SBY-M005A(U)
STATION SELECT MODULE

SYSTEM CONSTANT / MODULE	INPUT No. of VIDEO	TONE or BASS/ TREBLE	MULTI SOUND OR SCREEN	CHANNEL ALLOCATION			
NAME	D002	D003	D004	D005	D006	D007	D008
M004A (U)	×	○	×	×	×	×	×
M902A(U)	×	○	○	○	×	×	×
M005A(U)	×	○	○	×	×	×	×

SBY-P006A(U)
PERI.MODULE

IC002 AN6551
AMP

IC001
AN5352N
RGB AMP,
RGB/TV
SWITCH

OUT: Y 6.2V, B-Y 6.6V, G-Y 6.6V, R-Y 6.7V
IN(TV): Y 6.3V, B-Y 6.6V, G-Y 6.6V, R-Y 5.8V
IN: FAST SW 0V, B 3.2V, G 3.2V, R 3.2V, CONT REDUCE 0V, GND (FOR RGB) 0V

D005 ~ D007
MA3150(M)

BRIGHT (5V ~ 7.5V)
CONTRAST (2V ~ 6.1V)

B CUT OFF
R CUT OFF
RGB BRIGHT
RGB CONTRAST
D009 MA157

Q101 ~ Q105
2SD601(Q,R)
SWITCH

Q103
Q104
Q105
Q101
Q102
D102 1SS193
D101 MA3039(H)

Q003
2SD601(Q,R)
BUFFER
D002 MA3047(L) 1.2V
CLAMP

Q001
2SD601(Q,R)
BUFFER
+12V (FOR VIDEO)
H.V BLANKING

Q041
2SD601
(Q,R)
AMP
VIDEO IN (PERI)
GND

Q042
2SD601
(Q,R)
BUFFER

Q074
2SB709
(Q,R)
BUFFER
R IN (PERI) 5.7V

Q073
2SD601
(Q,R)
BUFFER
R OUT (PERI) 0V

Q072
2SB709(Q,R)
BUFFER
L IN (PERI) 5.7V

Q071
2SD601(Q,R)
BUFFER
L OUT (PERI) 0V

IC071
TC4066BP
TV/PERI
AUDIO SWITCH

IC041
TC4066BP
TV/PERI
VIDEO SWITCH

Q046
2SD601
(Q,R)
CLAMP

Q047
2SD601
(Q,R)
BUFFER
VIDEO OUT (TV) 4.7V

Q045
2SD601
(Q,R)
BUFFER

Q043
2SD601
(Q,R)
BUFFER

Q048
2SD601(Q,R)
BUFFER

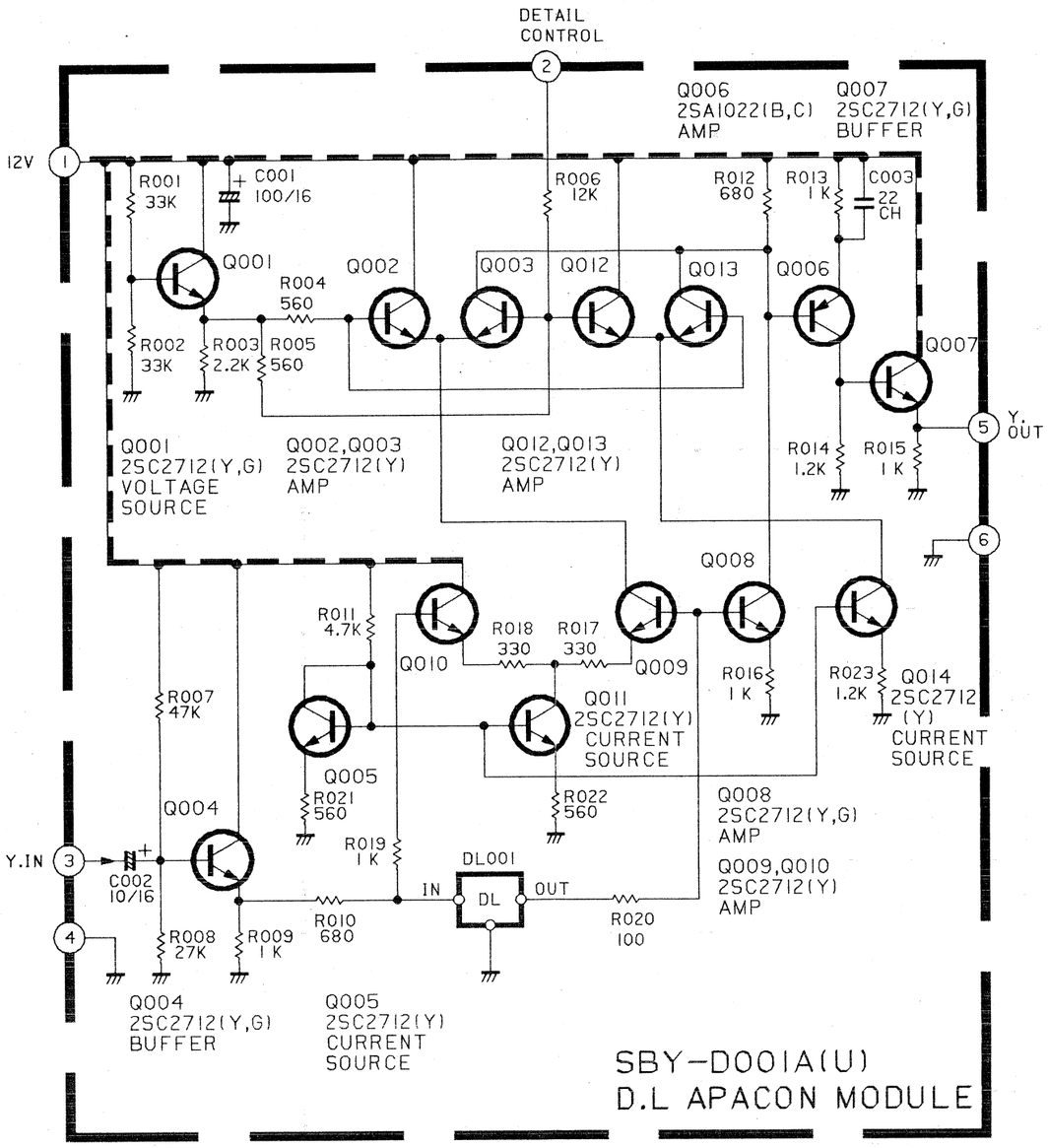
TV/V 0.2V/4.2V
SLOW SW 0.1V
R OUT (TV) 5.6V
R IN (TV) 4.5V
GND (FOR AUDIO) 0V
+12V (FOR AUDIO)

L OUT (TV) 5.6V
L IN (TV) 4.5V
AUDIO

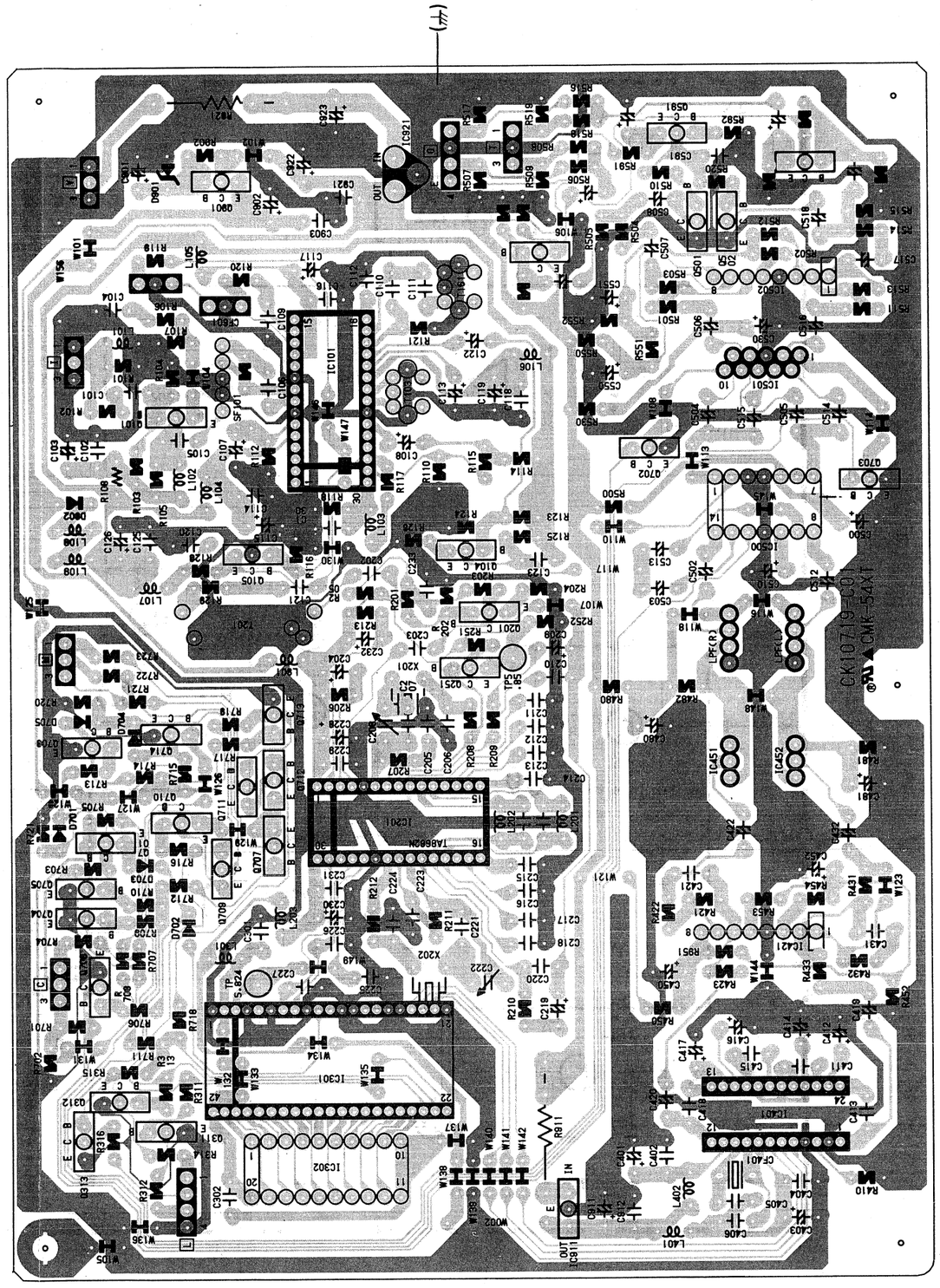
VIDEO IN (TV) 3.2V
VIDEO OUT2 (PERI) 3.8V
VIDEO OUT (PERI) 3.9V

GND
GND
GND
(FOR V.OUT)

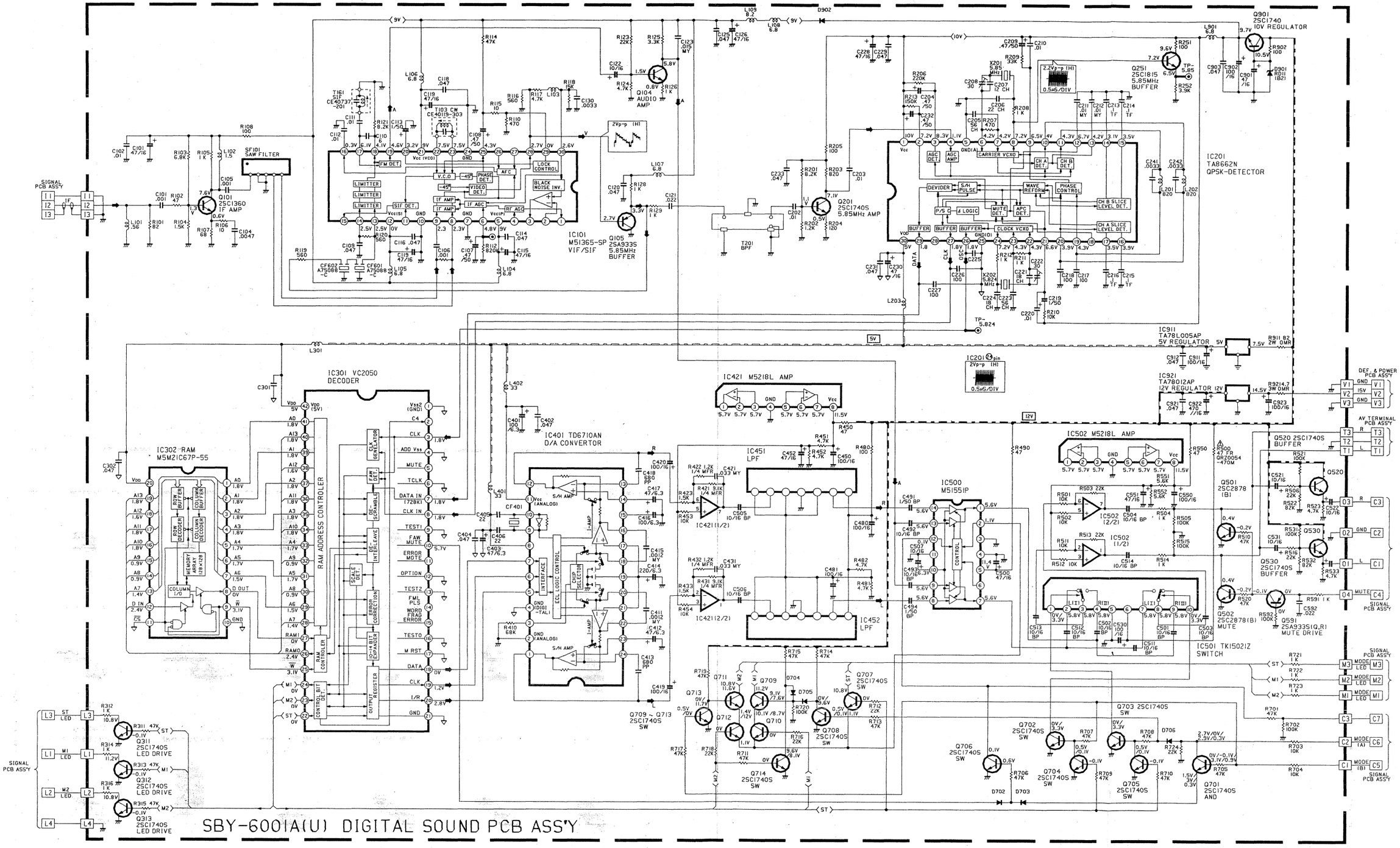
D.L. APACON MODULE SCHEMATIC DIAGRAM



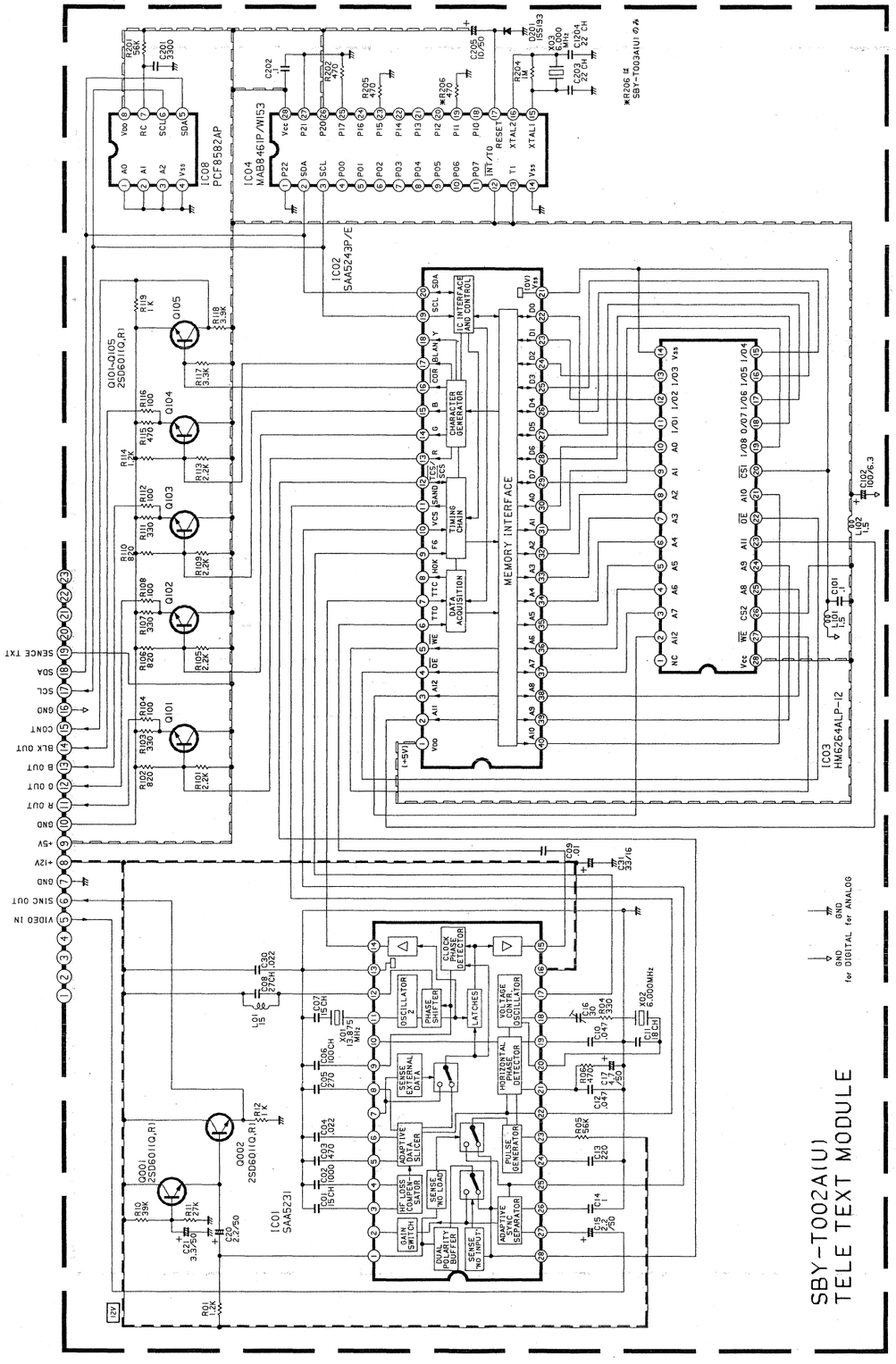
DIGITAL SOUND PCB BACK PATTERN



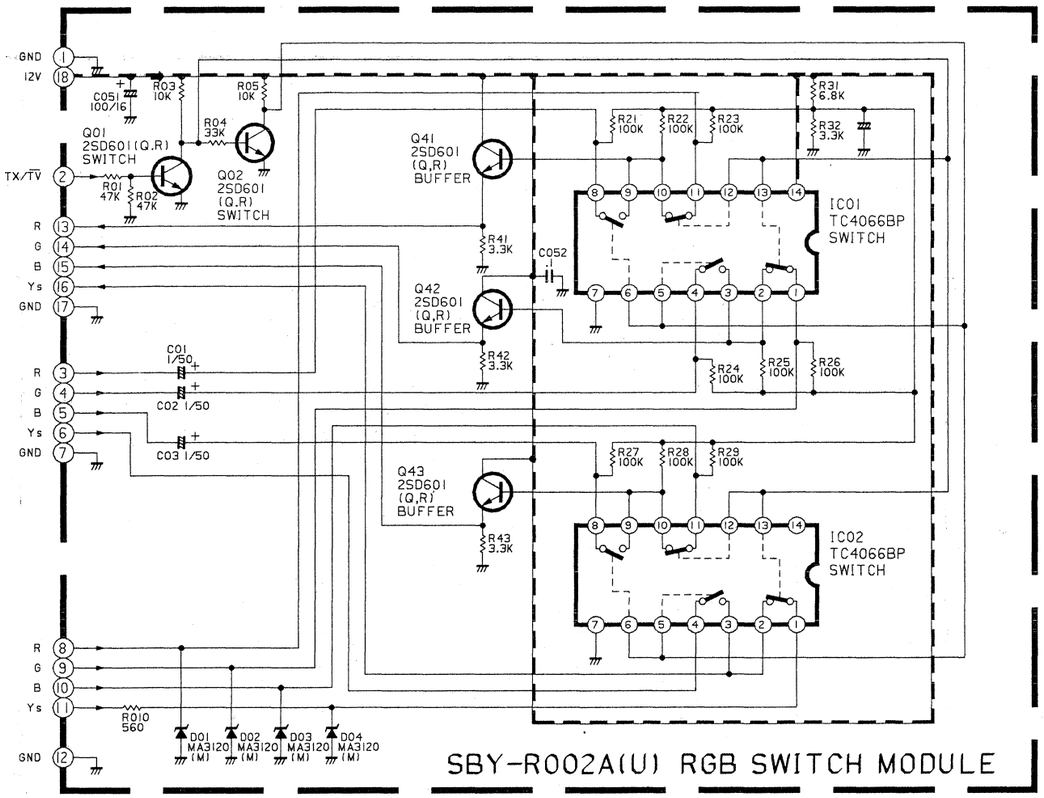
DIGITAL SOUND PC BOARD SCHEMATIC DIAGRAM



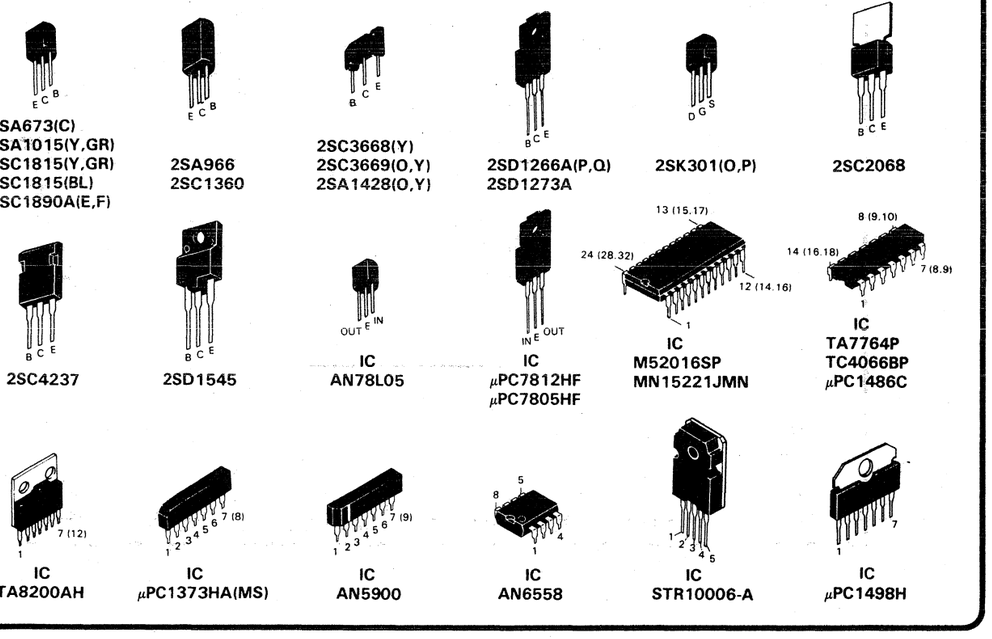
TELETEXT MODULE SCHEMATIC DIAGRAM



RGB SWITCH MODULES SCHEMATIC DIAGRAM



Basing of Transistor & ICs



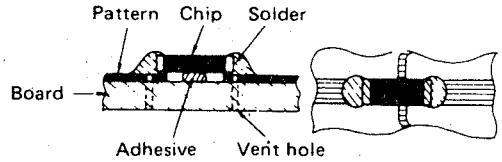
REPLACEMENT OF THE CHIP

* **CHIPS ARE NOT USED ON CERTAIN MODELS. REFER TO THE DESCRIPTIONS ON THIS PAGE ONLY WHEN WORKING ON MODELS ON WHICH CHIPS ARE EMPLOYED.**

* Replacement of the chip on printed circuit board can be performed easily as follows.

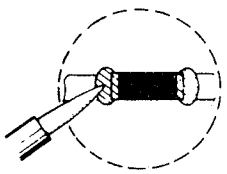
1 When mounted

[Resistor · Capacitor]

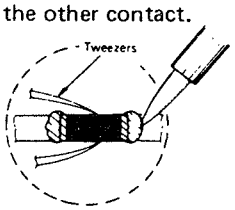


2 Removal of the chip

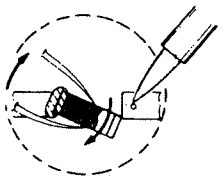
(1) Remove either of the soldered contacts.



(2) Hold the chip with tweezers and remove the other contact.



(3) Work the chip free from the adhesive with tweezers.

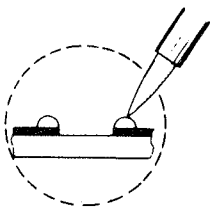


3 Preheating and soldering of chip pieces

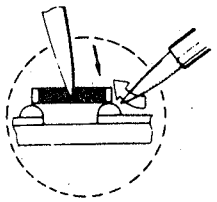
Be sure to preheat chip pieces (except the transistor) especially the capacitor before soldering with hot air, about 150°C (hair dryer or such can be used) for about 2 minutes. Then, immediately solder with an iron of about 30W.

4 Replacing the chip pieces

(1) Apply the solder to the board first.

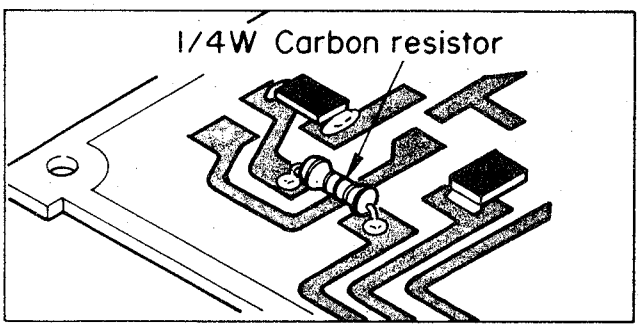


(2) Hold the chip with tweezers and solder it in place, hold the iron at a 45° angle when soldering.



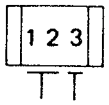
■ Discrete parts can be substitutionally mounted as shown in the figure on the right.
Mounting is also possible by passing the wires from the board front side (parts side) through the chip soldering hole (vent hole of registration part).
Substitute parts are as follows.

- Chip Metal Glaze Resistor
  → Carbon Resistor 1/4W ±5%
- Chip Ceramic Capacitor
  → Ceramic Capacitor 50V ±5%



■ **Decoding of chip parts constant terms**

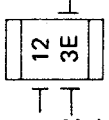
< Chip Metal Glaze Resistor >



Constant term: 12 — Multiplier: 10^3

$12 \times 10^3 = 12000\Omega$
$= 12k\Omega$

< Chip Ceramic Capacitor >



K, M, Z, P . . . . . Tolerance of ordinary type
C, P, R, S, T, U . . Temperature coefficient of temperature compensation type

Constant term: 12 — Multiplier: 3E

$12 \times 10^3 = 12000pF$
$= 0.012\mu F$